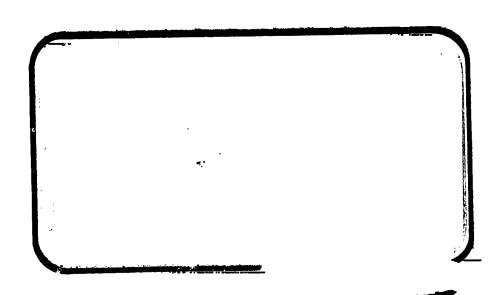


NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



NASA-CR-128794-Vol-1) RESULTS OF TESTS
OA12 AND IA9 IN THE AMES RESEARCH CEPTER
UNITARY PLAN WIND TUNNELS ON AN
0.030-SCALE MODEL OF THE SPACE (Chrysler
0.030-SCALE MODEL \$52.00 CSCL 22B

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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT



JOHNSON SPACE CENTER HOUSTON, TEXAS BATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

DMS-DR-2032 NASA CR-128,794

VOLUME 1 OF 18

RESULTS OF TESTS OAL2 AND IA9 IN THE

AMES RESEARCH CENTER UNITARY PLAN WIND TUNNELS

ON AN 0.030-SCALE MODEL OF THE SPACE SHUTTLE

VEHICLE 2A TO DETERMINE AERODYNAMIC LOADS

By

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Prepared under NASA Contract Number NAS9-13247

By

Data Management Services
Chrysler Corporation Space Division
New Orleans, Louisiana 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WING MUNNEL TEST SPECIFICS:

Tent Numbers:

ARC 11-707 (A)

ARC 97-707 (B)

ARC 87-707 (C)

NASA Series Numbers:

IA9A, B, C and

OALZA, C

Test Date:

2 April - 17 May, 1973

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Data Management Services

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AMES RESEARCH CENTER UNITARY PLAN WIND TUNNELS

ON AN 0.030-SCALE MODEL OF THE SPACE SHUTTLE

VEHICLE SA TO DETERMINE AERODYNAMIC LOADS

Ву

R. H. Spangler Rockwell International

ABSTRACT

Tests were conducted in the NASA/ARC Unitary Plan Wind Tunnels during April and May 1973, on an 0.030-scale replica of the Space Shuttle Vehicle Configuration 2A. Aerodynamic loads data were obtained at Mach numbers from 0.6 to 3.5.

The investigation included Tests IA9A, B and C on the integrated (launch) configuration and Tests OA12A and C on the isolated orbiter (entry configuration). The integrated vehicle was tested at angles of attack and sideslip from -8 degrees to +8 degrees. The isolated orbiter was tested at angles of attack from -15 degrees to +40 degrees and angles of sideslip from -10 degrees to +10 degrees as dictated by trajectory considerations. The effects of orbiter/external tank incidence angle and deflected control surfaces on aerodynamic loads were also investigated.

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- (C) CN, CLM, CAF versus ALPHA CLM versus CN
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INTRODUCTION

The 0.030-scale Aero Londs Space Shuttle model was tested in the Unitary Plan Wind Tunnels at ARC starting April 2, and continuing through May 17, 1973 as follows:

IA9A OAL2A IA9C OAL2C	11-foot Transonic 11-foot Transonic 8x7-foot Supersonic 8x7-foot Supersonic 9x7-foot Supersonic	April 2 to April 14, 1973 April 16 to April 29, 197 April 23 to May 1, 1973 May 2 to May 8, 1973 May 9 to May 17, 1973
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The testing was conducted in all three legs of the Unitary Plan Wind Tunnels to obtain a Mach number range from 0.6 to 3.5. Aerodynamic loads data were obtained for the ascent and entry configurations. The effects of control surface deflections were also investigated.

This report consists of 3 volumes of force data and 15 volumes of pressure data for a total of 18 volumes arranged in the following manner:

VOLUME NO.	CONTENTS
1 2 3 4 5 6 7	IA9A force data IA9B and IA9C force data OA12A and OA12C force data IA9A plotted pressure data IA9B and IA9C plotted pressure data OA12A and OA12C plotted pressure data IA9A tabulated pressure data (a) orbiter fuselage (b) orbiter base (c) upper MPS nozzle
8	(c) upper MPS nozzle IA9A tabulated pressure data (a) OMS nozzle (b) body flap (c) OMS pod outside
9	(d) lower wing surface IA9A tabulated pressure data (a) upper wing surface (b) left vertical tail surface (c) right vertical tail surface (d) APU inlet (e) SRM booster base
10	(d) APU inlet (e) SRM booster base IA9A tabulated pressure data (a) SRM booster (b) external tank (c) external tank base

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	(h) external tank base
13	TA9C tabulated pressure duta
	(a) orbiter fuselage
	(b) orbiter base
	(c) upper MPS nozzle (d) OMS nozzle
	(d) OMS nozzle
	(e) body flap
	(f) OMS pod outside
14	IA9C tabulated pressure data
	(a) lower wing surface
	(b) upper wing surface
	(c) left vertical tail surface
	(d) right vertical tail surface
1 5	IA9C tabulated pressur data
•	(a) APU inlet
	b SRM booster base
	(c) SRM booster
	(d) externel tank
	(e) external tank base
16	OALSA tabulated pressure data
	(a) orbiter fuselage
	b orbiter base
	c upper MPS nozzle
	d oms nozzle
	(e) body flap
	(f) OMS pod outside

INTRODUCTION (CONCLUDED)

17	OALSA	tobuloted pressure data
	(a)	lower wing surface
	(b)	uppor wing ourface
	(c)	left vertical tail surface right vertical tail surface
	(a)	right vertical tail surface
	(e)	APU inlet
18	OALŽC	tabulated prossure data
		. components

NOMENCLATURE General

1

TYMBOL	CAMBOL	DEFINITION
11		speed of sound; m/see, ft/see
$c_{\rm p}$	cD.	prensure ecofficient; (pl - pm)/q
м	МУСН	Much number: V/u
p		pressure; N/m², psr
d	Q(NSM) q(PSF)	dynamic pressure; 1/2pV2, N/m2, por
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
CI!	ALPHA	angle of attack, degrees
β	BETA	angle of sidealip, degrees
ψ	PSI	ungle of yew, degrees
φ	PHI	angle of roll, degrees
ρ		mass density; kg/m 3 , slugs/ft 3
•		Reference & C.G. Definitions
Λь		bese area; m ² , ft ²
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
L REF	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m ² , ft ²
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y sxis
	ZMRP	moment reference point on Z axis
SUBSCI b 1 s t	RIPTS	base local statl conditions total conditions free stream

NOMENCIATURE (Continued)

Body-Axia System

DAMBOT	ር አ ለውር ይለውር	DEFINITION
c _N	CN	normal-force coefficient; normal force
c_{Λ}	CΛ	uxinl-force coefficient; uxinl force
$\mathbf{c}^{\mathbf{\chi}}$	C Y	side-force coefficient; side force
$^{\mathrm{C}}A_{b}$	CVB	base-force coefficient; base force qG -Ab(pb - pm)/qG
$\mathtt{c}_{\mathtt{A_f}}$	CAF	forebody axial force coefficient, CA - CAb
$^{\mathrm{C}}{}_{\mathrm{m}}$	CLM	pitching-moment coefficient; pitching moment qSLREF
$c_{\mathbf{n}}$	C YN	yawing-moment coefficient; yawing moment
cℓ	CBL	rolling-moment coefficient: rolling moment
		Stability-Axia System .
$\mathbf{c}^{\mathbf{r}}$	CL	lift coefficient; lift qS
c^D	CD	drag coefficient; drag qS
c_{D_b}	CDB	base-drug coefficient; base drag
$\mathbf{c}_{\mathbf{D_{f}}}$	CDF	forebody drag coefficient; c_D - c_{D_b}
$\mathbf{c}_{\mathbf{Y}}$	CY	side-force coefficient; side force qF
$c_{\mathbf{m}}$	CLM	pitching-moment coerficient; pitching moment
c_n	CLN	yawing-moment coefficient; Yawing moment
c f	CRT	rolling-moment coefficient; rolling moment
L/ D	r/p	lift-to-drag ratio; C _I /C _D
${\tt L/D_f}$	L/DF	lift to forebody drag ratio; CI/CDP

NOMENCIATURE (CONTINUED)

ADDITIONS TO STANDARD LIST

SYMBOL	PLOT SYMBOL	DEFINITION
∂ _R	RUDDER	rudder, surface deflection angle, positive deflection, trailing edge to the left; degrees.
∂ e	ELEVON	elevon, surface deflection angle, positive deflection, trailing edge down; degrees.
$oldsymbol{\delta}_{ m RF}$	RUDFLR	rudder flare, split rudder deflection angle, left split rudder trailing edge left and right split rudder trailing edge right, $\delta_{RF} = (\delta_{RL} + \delta_{RR})/2$, positive deflection; degrees.
io	ORBINC	incidence angle between the orbiter and external tank, $i_0 = \alpha_t - \alpha_t$; degrees.
$oldsymbol{eta}_{\mathrm{T}}$	BETAT	angle of sideslip of external tank.
$\boldsymbol{\alpha}_{\mathrm{T}}$	ALPHAT	angle of attack of external tank.
$\boldsymbol{\ell}_{\mathrm{B}}$	LB	length of orbiter body; in.
$m{\ell}_{\mathrm{T}}$	LT	length of external tank; in.
l s	LS	length of SRM booster; in.
$\ell_{ m NM}$	LNM	length of OMS nozzle, positive direction forward of exit plane; in.
$\ell_{ m NP}$	LNP	length of MPS nozzle, positive direction forward of exit plane; in.
ъ/ ខ	BW	wing semi-span; in.
$\mathfrak{b}_{m{y}}$	BV	vertical tail span; in.
x	X .	distance from component nose; in.
V	Y	lateral distance from centerline; in.

NOMENCLATURE (CONCLUDED)

SYMBOL	PLOT SYMBOL	DEFINITION
Z	Z	vertical distance measured from W.L. 500 (vertical tail reference root chord); in.
c _w	CW	local wing chord; in.
c.v	CV	local vertical tail chord; in.
x/ £ _B	X/LB	longitudinal position/orbiter body length.
x/ £ T	x/lt	longitudinal position/external tank length.
x/ / 8	x/is	longitudinal position/booster length.
×/ ℓ nm	x/lm	longitudinal position/OMS nozzle length.
x/L NP	X/LNP	longitudinal position/MPS nozzle length.
x/c _w	x/cw	local chordwise position/local wing chord length.
x/c _v	x/cv	local chordwise position/local vertical tail chord length.
y/b/2	Y/BW	local spanwise position/wing semi-span.
z/b _v	z/bv	local spanwise position/vertical tail span.

CONFIGURATIONS INVESTIGATED

The 0.030-scale sero loads model was a replies of the Space Shuttle Vehicle PA. It consisted of four major components: the orbiter, the external oxygen and hydrogen tank (ET) and two solid rocket boosters (SRB).

On the ascent configuration, the orbiter was strut mounted from the ET on a Task Corporation MK XVI 2.5-inch diameter internal balance. The left SRB was strut mounted from the ET on a Task Corporation MK XXII 1.5-inch diameter internal balance. No attempt was made to simulate actual inter-attachments. The ET was sting mounted to the tunnel model support system on a Task Corporation 4.0-inch diameter internal balance. The right SRB was strut mounted symetrically to the left side, but did not contain a balance. The orbiter configuration, designated as Opa, consisted of B10C5DTW87V5R5M3F4.

The entry configuration consisted of the isolated orbiter, sting mounted to the tunnel model support system on a Task Corporation MK XXA 2.5-inch diameter internal balance. Midway through the OALCC test, the MK XXA balance was damaged and was replaced by the MK XXB for the high angles of attack. The orbiter was provided with deflectable elevons by means of interchangeable brackets, deflectable rudder by means of a pinindexed hinge, and interchangeable rudders to obtain different speed brake flare angles. The main propulsion system engines were removed during entry configuration testing to provide sting clearance. A cover plate was provided for the strut clearance hole.

The orbiter was instrumented with 37h pressure orifices on the left wing, left side of the fuselage, vertical tail, left OMS pod and engine, left and upper MPS engine and the base. The pressures were measured using eleven Scanivalve, Inc., S-type valve modules mounted internally (a five and a six gang unit). When tested in the entry configuration, the MPS pressures were not available for measurement.

The left side of the MT was instrumented with 136 pressure orifices. These pressures were measured by means of 7 Scanivalve, Inc., S-type valve modules configured as one unit of 6 modules and one single. These valves were mounted internally in the tank. The left SRB had one gang of six S-type modules to measure 102 pressures. The right SRB was not instrumented. The pressure transducers used in the valve modules were Statham PM 131 TC differential pressure transducers, with ranges of ±10 psid, ±12.5 psid and ±15 psid. Reference and calibration pressures were measured by the ARC micro manometers.

Some modifications were made to the model at the test site prior to

CONFIGURATIONS INVESTIGATED (CONTINUED)

testing. These were as follows:

- 1. The forward tip of the ET containing the retro rocket package (Reference NR Drawing VL78-000018) was replaced with a flush 0.90 inch radius nose (Model scale). The new nose had five pressure taps; one in the nose and four more aft of the nose on the vertical and horizontal axis on a 0.315 inch radius.
- 2. The ET balance cavity was enlarged by one inch on the diameter (from 5 inches to 6 inches) to provide clearance for cable routing and eliminate balance interference.
- 3. The clearances around both the orbiter and the SRB struts were opened to approximately 1/8 inch to prevent interference.
- 4. An alternate rudder hinge pin was provided to give a rudder deflection of +15 degrees.

Before and during the tests various model discrepancies developed or were discovered. These were generally minor and had only a negligible, if any, effect on the data. Significant discrepancies are noted below:

- 1. Pressure orifices P171 and P173 on the OMS pod base were omitted.
- During the test certain pressure taps developed leaks or became plugged. Data from these taps are questionable and should be used with caution. Difficulties in checking may have resulted in erroneous indications of leakage. Repairs were made to correct leaking or plugged pressure instrumentation, whenever possible, as the test progressed. The following list gives those taps that were indicated as bad on the various leak and response checks:

ARC Facility	Run Nos.	Orifice numbers with questionable pressure data
11'	2-4	72, 163, 427
	5-118	31, 100, 123, 163, 201, 427
	119-160	16, 98, 101, 107, 333, 427
¥	161-170	16, 98, 101, 107, 333, 427 + 306, 307, 327, 328, 336, 337, 356, 217, 375

CONFIGURATIONS INVESTIGATED (CONCLUDED)

ARC Freility	Run Non.	Orifice numbers with questionable pressure data
1.1'	171-182	16, 17, 53, 75, 78, 98, 107, 201, 236, 237, 238, 307, 327, 365, 427
	183-189	Same as (171-180) + 7, 均7, 505
¥	190-211	Same us (171-180)
8'x7' 	220-234	20, 21, 24, 74, 326, 327, 336, 424, 427, 752, 868, 871
	235 - 285	74, 326, 327, 336, 424, 427, 752, 868, 871
	286 - 300	74, 107, 115, 124, 129, 138, 326, 327, 336, 427
	301-305	74, 326, 327, 336, 427
*	306-333	74, 326, 327, 427
9 *x7 *	340-396	5, 325, 326, 327, 424, 427, 526, 752, 868, 871

TEST FACILITIES DESCRIPTION

Ames 11 x 11-Ft. Transonic

The Ames 11 x 11-Foot Transonic Wind Tunnel is a variable density, closed return, continuous flow type. This tunnel has an adjustable nozzle (two flexible walls) and a slotted test section to permit transonic testing over a Mach number range continuously variable from 0.4 to 1.4.

Ames 8 x 7-Ft. Supersonic

The Ames 8 x 7-Foot Supersonic Wind Tunnel is a closed-return, variable-density tunnel with a 8- by 7-foot rectangular test section. The nozzle has flexible side walls with fixed upper and lower surfaces. Mach number range is continuously variable from 2.45 to 3.5. Tunnel stagnation pressure can be varied from 0.3 to 2.0 atmospheres and Reynolds number per foot varies from 1.0 x 10^{17} to 5.0 x 10^{6} .

Ames 9 x 7-Ft. Supersonic

The Ames 9 x 7-Foot Supersonic Wind Tunnel is a variable density, continuous flow type with an adjustable nozzle to permit supersonic testing over a Mach number range continuously variable from 1.5 to 2.5. The nozzle is of the asymmetric, sliding-block type in which the variation of the test section Mach number is achieved by translating, in the streamwise direction, the fixed-contour block that forms the floor of the nozzle.

DATA REDUCTION

Standard procedures were utilized to reduce force and pressure data to coefficient form. The following dimensional constants were applied:

Reference Dimensions and Constants (Model Scale)	
SRef. = 0.401 ft ²	Orbiter reference area
Q Ref. = 39.849 in.	Orbiter reference length
Base Areas (Model Scale)	
$A_{BOI} = 0.1903 \text{ Ft}^2$	Orbiter base area, integrated
ABOA = 0.2362	Orbiter base area, sting mounted
$A_{\text{BMPSU}} = 0.0117$	Orbiter upper MPS base area
$A_{\text{BMPSL}} = 0.0353$	Orbiter lower MPS base area
$A_{BACPS} = 0.0310$	Orbiter ACPS base area on OMS pod
$A_{BOMS} = 0.0231$	Orbiter OMS nozzle base area
$A_{BPOD} = 0.0257$	Orbiter OMS pod base area
Aco = 0.0611	Orbiter sting cavity base area
$A_{BNOZ} = 0.0564$	SRM nozzle base area
$A_{BSKTRT} = 0.1709$	SRM nozzle skirt base area
$A_{BETT} = 0.3189$	ET Base area
A _{CET} = 0.1964	ET Sting cavity base area

DATE: Mny, 1973 TEST: OAIZ / FAG TABLE I. **TEST CONDITIONS** STAGNATION TEMPERATURE DYNAMIC PRESSURE **REYNOLDS NUMBER** MACH NUMBER (degrees Fahrenheit) (pounds/sq. inch) (per unit length) 120° NUM. 540 4.0 X106 0.6 800 4.5 0.9 800 4.0 630 3.0 1.25 650 3.0 600 2,8 1.55 490 2.3 2.0 1.5 300 2.5 350 2.0 3.0 300 3.5 2.0 FIVE (5) TASK CORPORATION BALANCES BALANCE UTILIZED: WITH CAPACITIES AS FOLLOWS: INTEGRATED VEHICLE
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COMMENTS: THE MARK IXA, 250 DIA. BALANCE WAS

DAMAGED AFTER RUN 319. THE MARK IXIS WAS

SUBSTITUTED FOR RUN 320 AND SUBSEQUENT RUNS

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4000

2.5"

600

4000

5/2E

2.5"

200

1000

1.5"

1500

4000

1000

10,000

4.0"

TEST: ARC 11- DATA SET CONFIDENCY D2A + O2 O3 O4 O5 O6 O6 O7 O7 O7 O7 O7 O7 O7 O7	◆TT OTOTI	DATA SET/RUN NUMBER COLLATION SUMMARY	-	SCHU, PARAMETERS/ VICES	TT 400001543	0	4	 -4	7 12 22 32 42	5 13 23 33 43 49	4 14 24 34 44	7 15	16 26 36 46	17 27 37 47	. 5	} }	217	0	911	100 105	3 19 25 31 37 43 49 55 5 5 75 5 5 5 5 5 5 5 5 5 5 5 5 5 5	10. AST 10. AS	= -8,-6,-4,-2,0,2,4,	4 0
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TABLE II. CONTINUED

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TEBLE II. CONTINED

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TABLE II. CONTINUED

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TABLE II. CONTINUED

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DATE: 5-9-73	ALTERNATE INDEPENDENT VARIABLE																				55 61 67	4	-3, ·6	-3,-6	
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TABLE II. CONCLUDED

5-6-13	PENDENT VARIABLE)							TES	TRI	JN	NUM	BEF	RS					61 67 75.75	IDVAR (1) IDVAR (2) NDV
DATE	MACH NUMBERS (OR ALTERNATE INDEPENDENT	5	74	P	89	02	3/									- +-		49 55	
SET/RUN NUMBER COLLATION SUMMARY	AMETERS/VALUES NO. MACH N	SFR RUNS 2.5 3.5	40 2 325 324	40 7 327 326	40 329 328	46 332 330								7				31 37 43	COEFFICENTS
DATA SET/		a B Se	0 0 0	0 01 0	0 -20 0	E 0 0	0 0 9											19 25	10,6,0
EST: 87-707 (ØAI2C)		DATA SET CONFIGURATION	BOLIO BUT DNEMNINGHE E. 30	Koux 17 Choca 27 4 Sans	27	22	22											7 13	1 3 20:

TABLE III. MODEL COMPONENT DIMENSIONAL DATA

MODEL COMPONENT: Blo Body	,	
GENERAL DESCRIPTION:Fuselage, 2A Configu	uration, Lightweigh	t Orbiter, per
Rockwell Lines VL70-000089 "B."		
Scale Model = .030		
VL70-000089 "E VL70-000092 "E VL70-000092 "E	31, 94 "A"	
DIMENSIONS:	FULL-SCALE	MODEL SCALE
LengthIN	1328.3	39.8490
Max. Width $\sim IN$ (@X _o = 1528.3)	265.0	7.9500
Max. Depth \sim IN. (@X _o = 1480.52)	248.0	7.4400
- Fineness Ratio	5.012	5.012
Area_Ft2		•
Max. Cross-Sectional	456.4	.41076
Planform		· .
Wetted		
- Base	and the second s	

MODEL COMPONENT: Canopy - C5		
GENERAL DESCRIPTION: 2A Configurat	tion per Lines VL70-00009	
Scale Model = .030	•	
DRAWING NUMBER: VL70-C	00092	· ·
DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length (STA FWD Bulkhead)	391.0	11.730
Max. Width (T.E. Bulkhead)		16.800
Max. Depth (WP = 42.9 22	to = 500)	
Fineness Ratio		
Area	•	
Max. Cross-Sectional	-	
Planform		
Wetted		
—		

MODEL COMPONENT: Manipu	lator Housing D-7		
GENERAL DESCRIPTION: 2A	Configuration per F	lockwell Lines VL	70-000093
	· · · · · · · · · · · · · · · · · · ·		
Scale Model = .030			
DRAWING NUMBER:	V170-000093		
DIMENSIONS:		FULL-SCALE	MODEL SCALE
Length ~ IN.	•	881.00	26.430
Max. Width∼IN.		51.00	1.530
Max. Depth ~IN.		23.00	.690
Fineness Ratio		•	
Area			•
Max. Cross-Sec	tional	•	**************************************
Planform	•	•	
Wetted	٠		
: . Base			
C Fuselage BP = WP =	0.00	Months of the Community	The second second

TABLE III. (CONTINUED) MODEL COMPONENT: WING-W87 New Light Weight Orbiter			
GENERAL DESCRIPTION: Orbitor Configuration For Lines VL70-000093.			
NOTE: (Dihodral Angle is defined at the lower sur	face of the Wing	at the 75.33%	
element line projected into a plane perpendiculary	<u> </u>		
Scale Model = .030	DWG. NOVL	70-000093	
TEST NO.			
DIMENSIONS:	FULL-SCALE	MODEL SCALE	
TOTAL DATA Area (Theo.) Ft2 Planform Span (Theo In. Aspect Ratio Rate of Taper Taper Ratio Dihedral Angle, degrees Incidence Angle, degrees Aerodynamic Twist, degrees Sweep Back Angles, degrees Leading Edge Trailing Edge O.25 Element Line Chords: Root (Theo) B.P.O.O. Tip, (Theo) B.P. 46834 MAC Fus. Sta. of .25 MAC W.P. of .25 MAC	2690.00 936.68 2.265 1.177 0.200 3.5000 3.5000 3.500 45.00 -10.24 35.209 689.24 137.85 474.81 1136.89 299.20	2.42100 28.10040 2.265 1.177 0.200 3.500 +3.00 +3.000 45.00 -10.24 35.209 20.67720 4.13550 14.24/30 34.10670 8.97840	
183.13 B.L. of .25 MAC EXPOSED DATA Area (Theo) Ft ² Span, (Theo) In. BP108 to 468.341 Aspect Ratio Taper Ratio	182.13 1752.29 720.68 2.058 .2451	1.57706 21.62040 2.058 .2451	
Chords Root BP108 Tip 1.00 b MAC Fus. Sta. of .25 MAC W.P. of .25 MAC B.L. of .25 MAC Airfoil Section (Rockwell Mod NASA)	562.40 137.85 393.03 1185.31 300.207 143.76	16.8720 4.13550 11.79090 35.55930 9.00621 4.31280	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
Data for (1) of (2) Sides Leading Edge Cuff Planform Area Ft Leading Edge Intersects Fus M. L. @ Sta Leading Edge Intersects Wing @ Sta	120.33 560.0 1035.0	.10830 16.80 31.050	

MODEL COMPONENT: Elevon E-18		
GENERAL DESCRIPTION: 2A Configuration Per	W-87 Rockwell Line	n VI. 70-000093
Data for (1) of (2) Sides		S TO THE REST OF THE REST OF THE REST
Scale Model = .030		Charles and Charle
DRAWING NUMBER: VL 70-000093		
DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area ~ Ft ²	205.52	.18497
Span (equivalent) ← IN.	353.34	10.60020
Inb'd equivalent chord	114.78	3.44340
Outb'd equivalent chord	55.00	1.6500
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	. 208	
At Outb'd equiv. chord		
Sweep Back Angles, degrees	•	·
Leading Edge	0.00	0.00
Tailing Edge	_10,24	_10.24
Hingeline	0.00	0.00
	Ft3 1548.07	.04180

MODEL COMPONENT: VERTICAL - V5	(Light Weight Orbi	ter Configuratio	n)
GENERAL DESCRIPTION: Centerline	Vertical Tail, Dou	bla Wedga Airfoi	1 with Rounded
Leading Edge			
Scale Model = .030			
DRAWING NUMBER:	VI.70-000055		
DIMENSIONS:		FULL-SCALE	MODEL SCALE
TOTAL DATA			
Area (Theo) Ft ² Planform		413.25	.371.92
Span (Theo) In		315.72	9.47160 1.675
Aspect Ratio Rate of Taper	, ,	0.507	0.507
Taper Ratio Sweep Back Angles, degree	S	.404	.404
Leading Edge Trailing Edge	•	45.000 26.249	45.000 26.249
0.25 Element Line Chords:		41.130	41.130
Root (Theo) WP Tip (Theo) WP		268.50 108.47	8.05500 3.25410
MAC Fus. Sta. of .25 MAC		199.81 1463.50	5.99430 43.90500
W. P. of .25 MAC		635. 522	19.06566
B. L. of .25 MAC Airfoil Section		0.00	0.00
Leading Wedge Angle Trailing Wedge Angle	Deg Deg	10.000	10.000 14.920
Trailing Wedge Angle Leading Edge Radius Void Area Ft ²	IN.	2.00	.06 .01185
Blanketed Area Ft2	•	12.67	.01140

MODEL COMPONENT: R-5 Rudder		
GENERAL DESCRIPTION: ZA Configuration per Roa	kwell Lines V	rL 70-00095
Scalo, Modol = .030		
DRAWING NUMBER: VL 70-00095		
DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area ~ Ft ²	106.38	.09574
Span (equivalent) ~IN.	201.0	6.030
Inb'd equivalent chord	91.585	2.74755
Outb'd equivalent chord	50.833	1.521.99
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.400	0.400
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees	•	. ·
Leading Edge	34.83	34.83
Tailing Edge	26.25	26.25
Hingeline	34.83	34.83
Area Moment (Normal to hinge line) ~Ft3 Product of Area ani Mean Chord	526.13	.01421

MODEL COMPONENT:	OMS Pod -M3		
GENERAL DESCRIPTION	1: 2A Light Weight Conf	Iguration per Rock	vell Lines
V1.70-00094A			
Scale Model .03	0		
DRAWING NUMBER:	V170-000094A	_	
DIMENSIONS:		FULL-SCALE	MODEL SCALI
Length	•	346.0	10.380
Max. Width	$x_{2} = 1450.0$	108.0	3.240
Max. Depth	$X_0 = 1500.0$	113.0	3.390
Fineness Rat	io		***************************************
Area			•
Max. Cr	oss-Sectional		
Planfor	m	-	·
Wetted			
Pase of OMS Pod	Pa g-m		

WP = 463.9 IN. FS WP 400 + 63.9 = 463.9

BP = 80.0 IN. FS

Length 1214.0 to 1560.0' = 346.0 IN. FS

DODEL COMPONENT: FA BOX	iy Flap	
ENERAL DESCRIPTION: 2A	Configuration per Rockwell Lin	es VL70-000094A
	•	
Scale Model = .030		
DRAWING NUMBER:	V170-000094A	
DIMENSIONS:	FULL-SCA	ALE MODEL SCAL
Length	ध्य.70	2.541
Max. Width	265.00	7.950
Max. Depth	The state of the s	
Fineness Ratio	-	
Area ~ Ft ²		•
Max. Cross-Se	ctional	
Planform	142.6	.12838
Wetted		
Rase Ft.2	38.6	5 .03478

MODEL DIMENSIONAL DATA

MODEL COMPONENT : S3-Booster Solid Roo	ket Motor	
GENERAL DESCRIPTION: 2A Configuration & VL72-000061 "B"	Per Rockwell	Lines VL77-000012
Body of Revolution; Data for (1) of (2	P) Sides	
Scale Model = .030		
DRAWING NUMBER: VI. 77-000012		
DIMENSIONS :	FULL SCA_E	MODEL SCALE
Length ~IN.	1732.0	51.96
Max Width (DIA) IN. BSRM Tank	142.0	4.260
Max Depth (DIA) Aft Skirt	259.0	7.77
Fineness Ratio L/D	6.687	6,687
. Area ~ Ft^2		
Max. Cross-Sectional (Aft	365.87	.32928
Planform Skirt)		
Wetted		-
Base		•

Ref.

TABLE III. (CONCLUDED)

MODEL COMPONENT: EXTERNAL TANK - T9	;	
•	(.	;
GENERAL DESCRIPTION: 2A Configuration		
NOTE: T9 identical to T8 M/O retro pkg.	nose w/30"R F.S.	
DRAWING NUMBER NONE		
DIMENSION:	FULL SCALE	MODEL SCALE
Length - IN.	1858	55.740
Max Width (Dia) - IN.	324.0	9.720
Max Depth		
Fineness Ratio L/D	5.73457	5.73457
Area - FT ²		•
Max Cross-Sectional	572.56	0.51530
Planform		
Wetted	•	•
Base .		•
Nose, Radius, IN.	30.0	, ,

ORBITER BODY

#.

	180	23 41 41 50 50 79 107 115 129 138
	172	09
	169	77
	165	. 82 96 106 114 1154 1170
	162	70
SEES	157	. 61
~ DEGREES	150	31 40 49 49 58 89 105 1138 1145 1153 1169
	142	
TION	135	135 144 152 160
RADIAL LOCATION 0	120	30 39 4,8 57 68 88 96 104 112 112 112 1134 1143 1173
RADTAI	110	17.1 17.2
	105	133 142 150 158
	96	22 29 38 47 56 79 87 95 111 120 126 1132 111 149 165
	70	28 46 55 78 86 94 110 1119 1119 1140 1140 1140 1140
	55	27 36 4,5 54 65 77
	01	26 35 44 53 44 53 101 100 1109 1118 1130 1130
	20	25 34 52 52 75 75
	0	20 21 22 24 33 100 100 116 116
°×~	x,0/	
STATION	MODEL	6.00 6.30 6.75 6.75 11.40 12.90 12.90 16.80 16.80 16.80 16.80 16.90 11.25 11.25 14.40 15.90
ORBITER	FULL	200 210 210 225 280 280 1400 1430 1600 1600 1600 1600 1600 1600 1600 16

a OMS POD, INSIDE

b OMS POD, OUTSIDE

a. Orbiter body

Table IV. Pressure Orifice Locations

ORBITER BASE

ORIFICE NUMBERS	1, 0, 3, 4	8 ji, 12, 13, 14 15, 16
LOCATION	ORBITEE BASE (INTEGRATED) LEFT MPS NOZZLE BASE UPPER MPS NOZZLE BASE ACPS BASE AREA ON OMS POD	OMS NOZZLE BASE OMS POD BASE OPEITER BASE (STING MOUNT) OPBITER STING CAVITY

176

47.40 175

1580

 $\theta \sim \text{DEG}$

ORB. STA. ~ X FULL MODEL

BODY FLAF LWE SURFACE

		22	(*)
	θ~ DEG	180	173 180
OMS NOZZLE	θ	135	177
CIMIC	E	MODEL	0.30
	X ~ IN	FULL	1C 20

		270	186 192 197
		225	185 191 196
	5 <u>E</u> G	180	184 190 195
,,	$\theta \sim \text{deg}$	135	183 189 194
MPS NOZZLE		96	182 188 193
E S		0	181 187
	X ~ IN.	MODEL	0.75 1.50 225
	X .	FULL	25 50 75

	TAIL	
7	VERTICAL TAIL	
	F	

FULL MODEL 7. 15.75 .C. 15.50 .15.50 .15.50	EL 75	9.6 9.00									
+	75	620		0	.05	.15	.30	.52	.65	.775	.90
-	75	620.	t	1							
+	50	G		100						Ì	
_	50	(-		1,11	412	413	414	415	416	
		.158	i p;	017	511	512	513	514	515	516	
			T.		LO.1	1,00	123	† 5†	125	7.56	+21
00.81 009		.316	J D	420	5211	522	523	52₽	525	526	527
	1	1	1			000	1,00	1, 2),	135	136	437
		0,9	ы	130	431	4 5 5	433	1 1 1 1 1 1	535	536	537
069	2	2	В	?	531	232	733	7.7			1
			-		1441	747	1443	1077	445	944	1.
765 22.95	95	. 8 ¹ 4	η ρ	011	541	542	543	544	545	546	247
+					1,51	152	453	454	さらら	456	754
792 23.76	76	.925	-1 PC	1,50		552	553	554	555	226	557

b. Orbiter Base, Body Flap Lower Surface, and Vertical Tail Table IV. Continued.

ORBITER VING

8	ORBITTER B.P	P Y		L							χ̈́χ	- THEORETICAL WING CHORD	EFICAL	WING	CHORD									
FULL	MODEL	4		64	_	35	-15	033	0.0	ę	ž.	.25	04.	.55	8.	.65	.70	227.	.75	. 775	.8c	.85	.90	.95
140	1,25	.299	ÞH		201 301		302			203 303		20t 30t		205 305					306.		207 307	306		203 303 303
170	5.10	1 86.	p H			023	a a a			212														
200	6.00	124.	PH					220		ផ្គ	222 322		223 325	22 324					325		% % % %	327	22 8 326	329
*	7.5	48.	ры,						230	231 338	232 332	233 333	234 334	235				336		333		338	339	25°C
315	9.45	.673	ម្ម						250	251 351	252 352	253 353	25h 35h	255 355			38,036			357		256 353		259 359
365	10.95	.790	рu						260	261 361	2 62 362	263 363				3 5			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$			36,38		2£7 367
115	b15 12.b5	.881	ъH						270	271 371	272 372	273 373	274 374		275 376				276 376				FZ FE	
											!													

U - UPPEP SURFACE L - LOWER SURFACE

7	X/C LOCAL WING CHORD
882	.299 0, .094, .229, .362, .497, .700, .834,.865, .900 , .965
.364	0, .086, .246
124	0, .081, .177, .402, .565, .760, .808,.857, .905, .953
.53h	SAME AS THEORETICAL CHORD
.673	
.780	
.e37	

c. Orbiter WingTable IV. Continued.

EXTERNAL TANK

	270	950
	180	619 629 639 649 659 709 719 719 729 749 759
	165	638 648 658 668 678 698 728 728 778
DEG	150	627 637 647 657 657 667 707 717 747 757 767
$\theta \sim 1$	135	676 696 716 736 756 776
	120	625 635 645 665 665 665 665 715 725 725 745 765
	96	614 624 634 644 644 654 664 714 714 714 714 714 714 714
	09	623 633 643 643 653 653 663 713 713 773 773
	30	622 632 632 642 652 662 672 772 772 772
	0	610 621 621 631 641 671 771 771 771 771 771 771 771 771 77
Ħ	XTA/TX	0.001.001.001.001.001.001.001.001.001.0
STA ~	MODEL	9.48 9.53 12.00 19.20 20.10 21.30 22.50 28.50 34.50 34.50 34.50 51.00 51.00 51.00
TANK	FULL	316. 317.7 400 520 640 670 710 750 850 950 1150 1150 1150 1150 1150 1150 115

d. External Tank Table IV. Continued.

LEFT SRM

SRM	STATION ~	- XS		θ ~ DEG							
FULL	MODEL	xs/ls	0	45	90	135	180	225	270	31 5	
	6.00 7.80 11.10 12.00 13.50 16.50 21.00 25.50 37.50 43.50 49.50 52.50 53.70 55.50 57.00		810 811 821 831 841 851 861 871 881 901 911 921 931 941 951 802	812 822 832 842 852 922 932 942 952	813 823 833 843 853 863 873 883 893 913 923 943 953	814 824 834 844 854 924 934 954	815 825 835 845 855 865 875 885 905 915 925 935 955	816 826 836 846 856 866 926 936 946 956	817 827 837 847 857 867 877 907 917 927 937 947 957	818 828 838 848 858 868 928 938 948 958	

e. Left SRM

Table IV. Concluded.

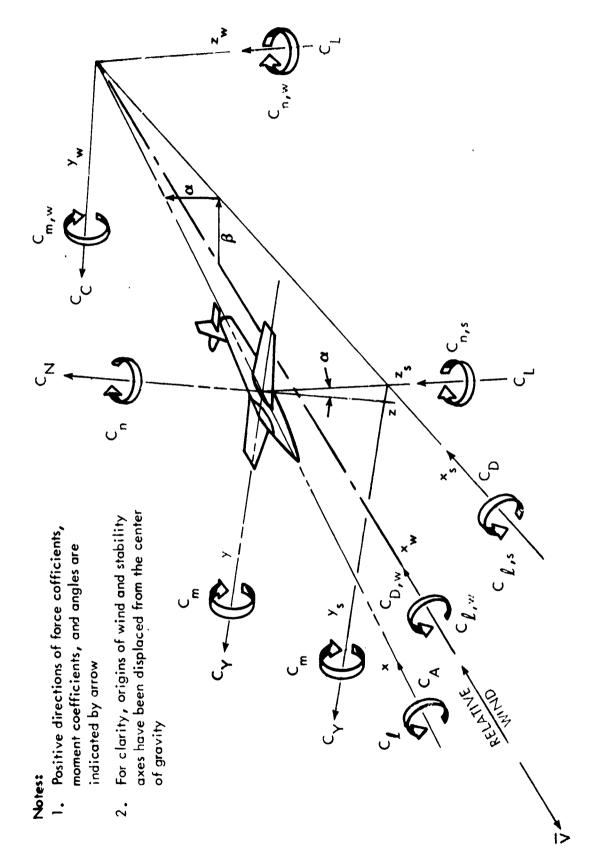
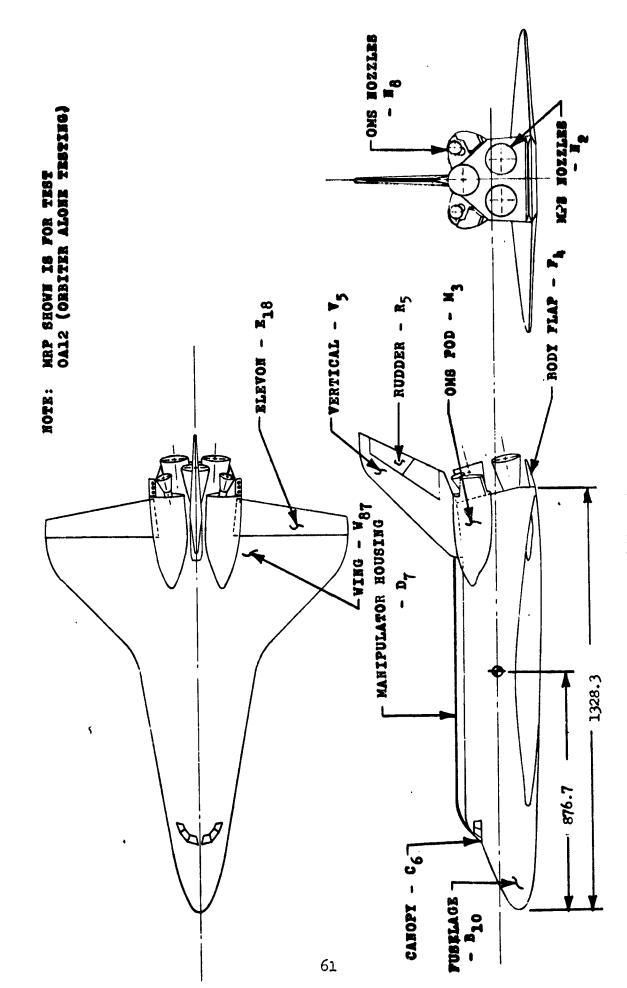


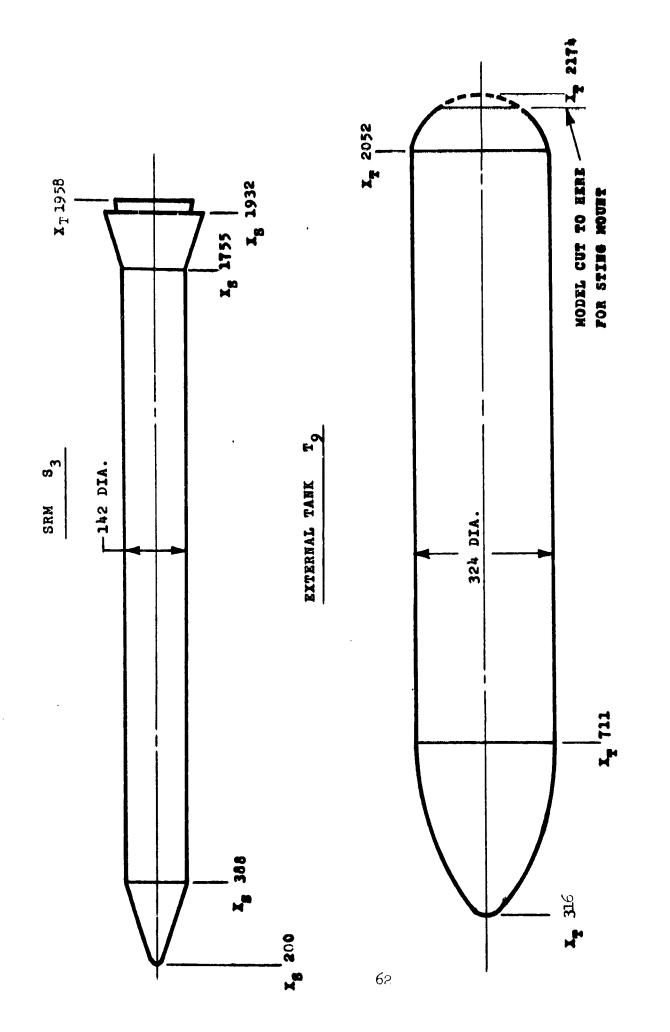
Figure 1. - Axis Systems.

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a. Orbiter, Ord

Figure 2. - Model Sketches.



b. SRM, S₃, and External Tank, T₉
Figure 2. - Continued.

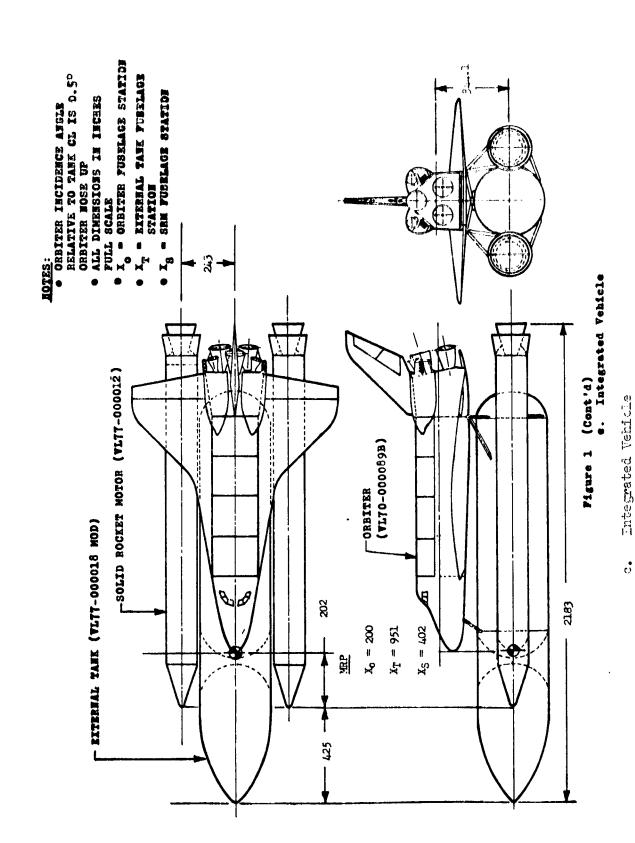
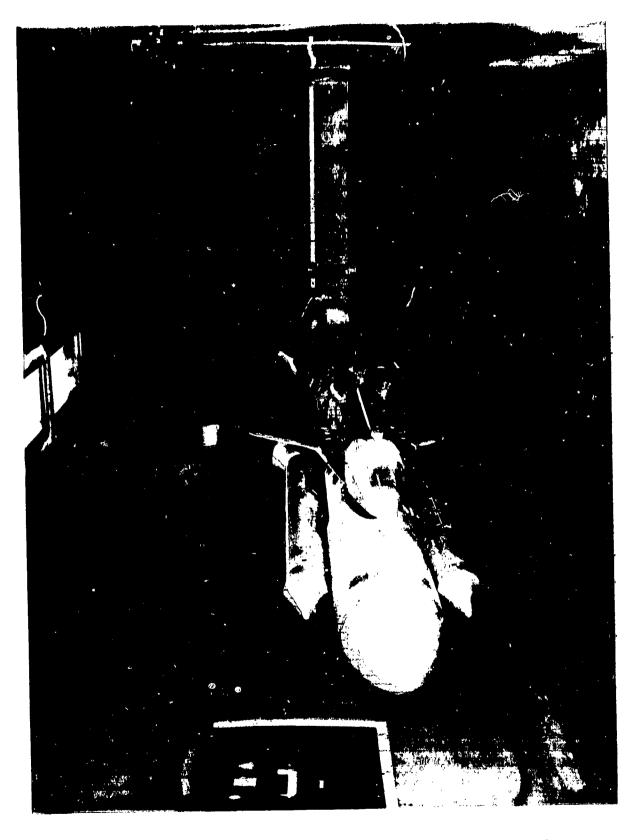


Figure 2. - Concludes.

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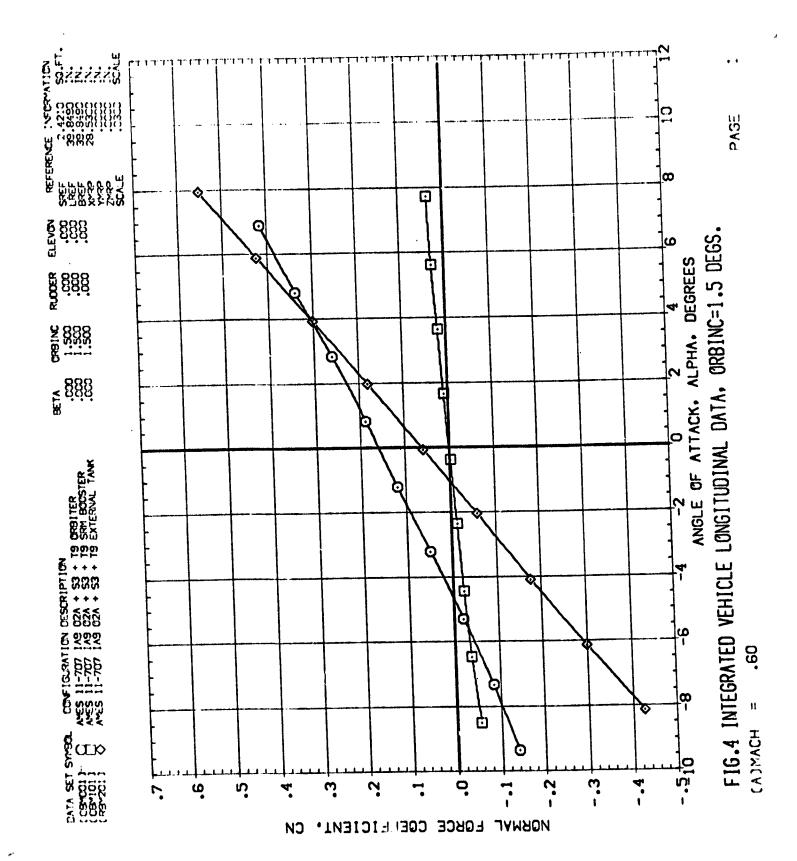


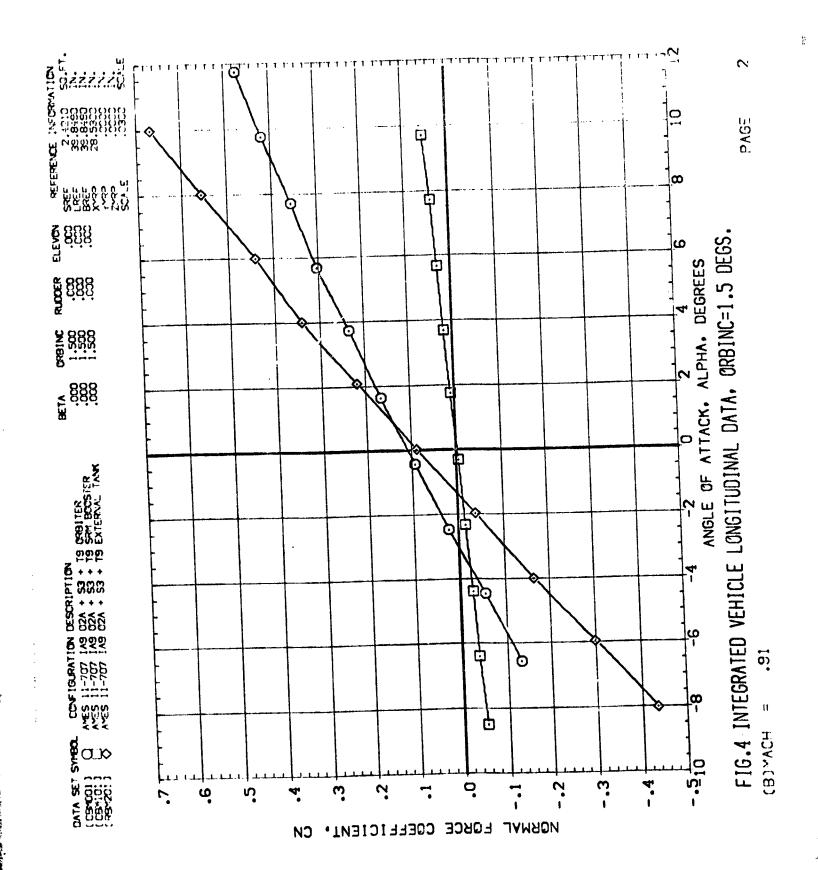
a. Integrated (Launch) Vehicle Mounted in the ARC 9x7 Ft. Tonnel Figure 3. - Model Installation Photographs

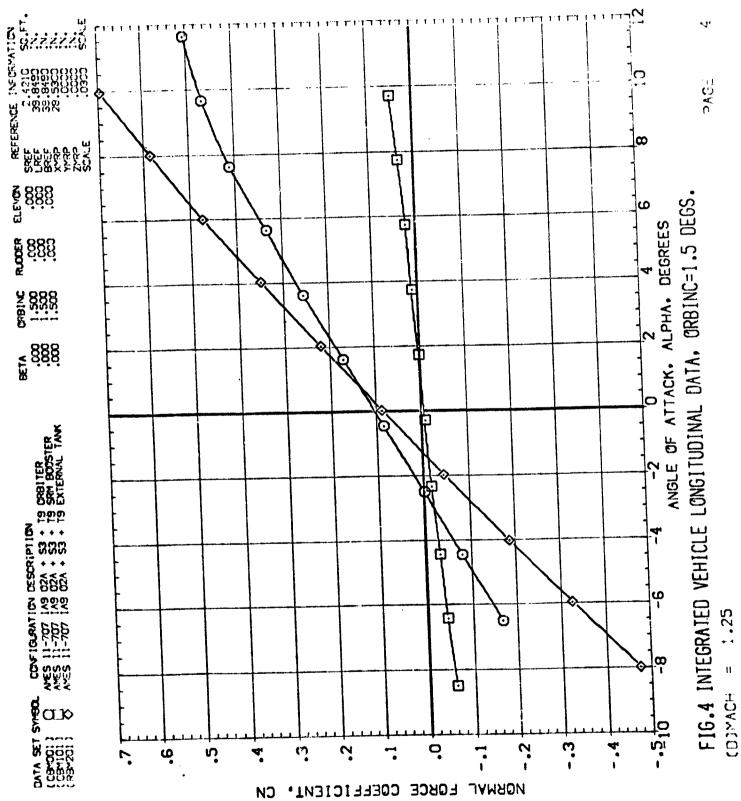


Isolated Orbiter (Entry Configuration) Mounted in the ARC Ox7 Ft. Tunnel Figure 3. - Concluded.

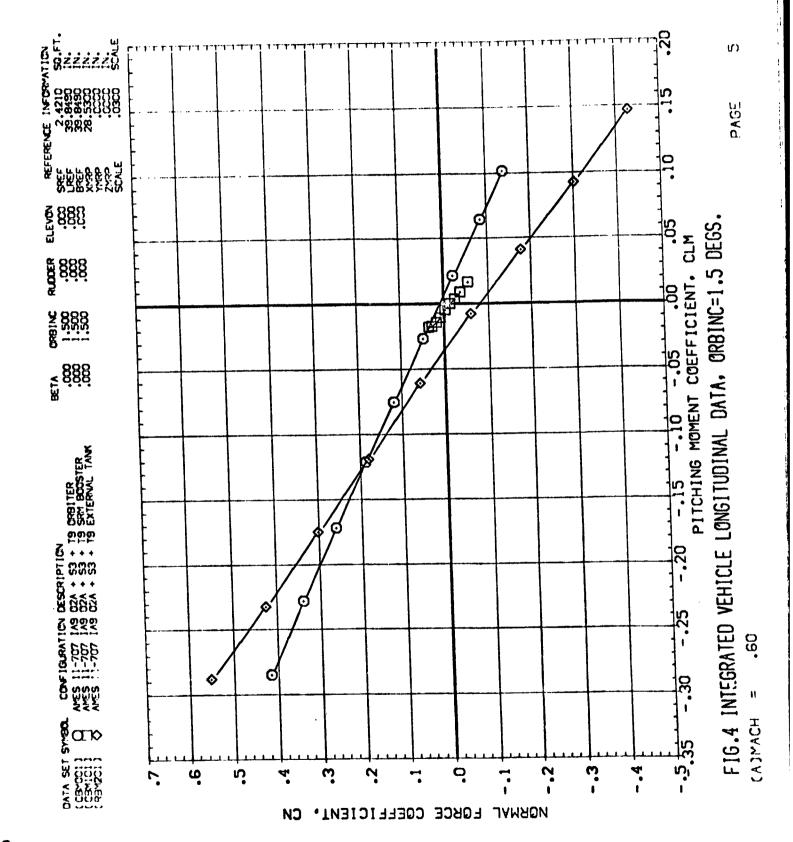
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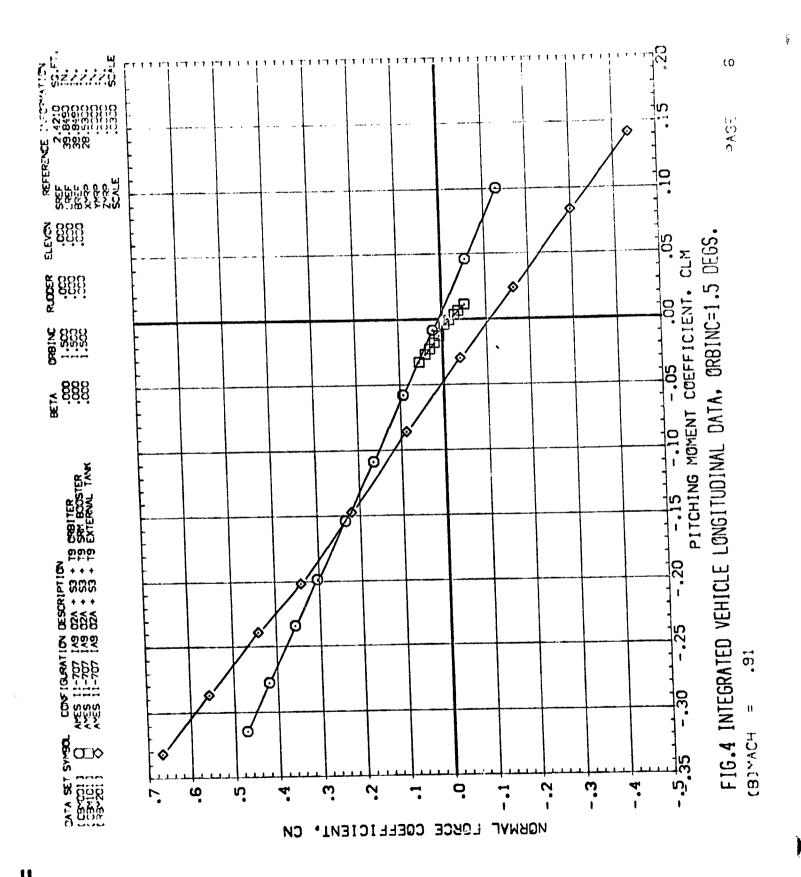


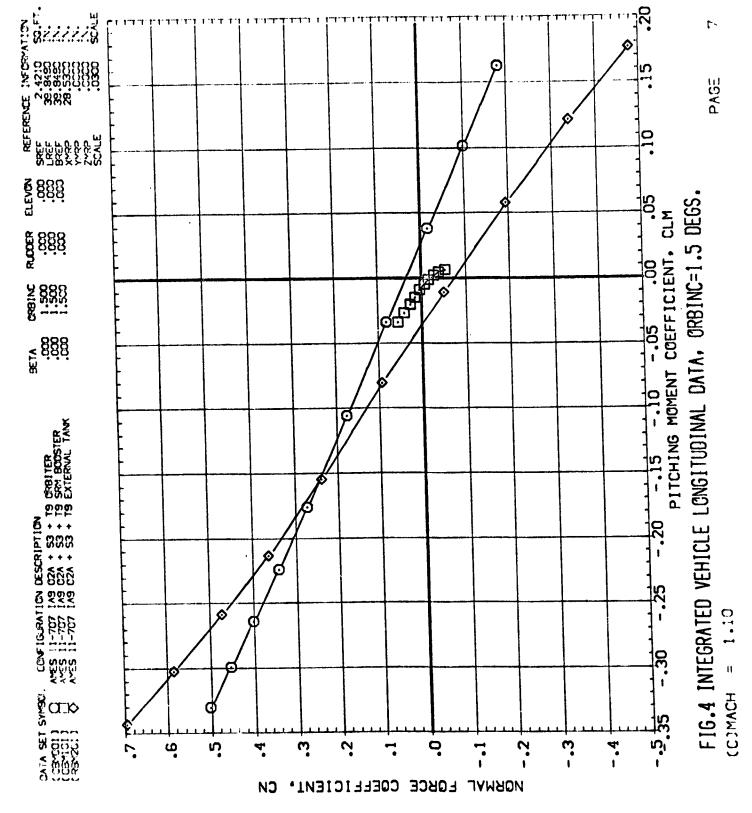


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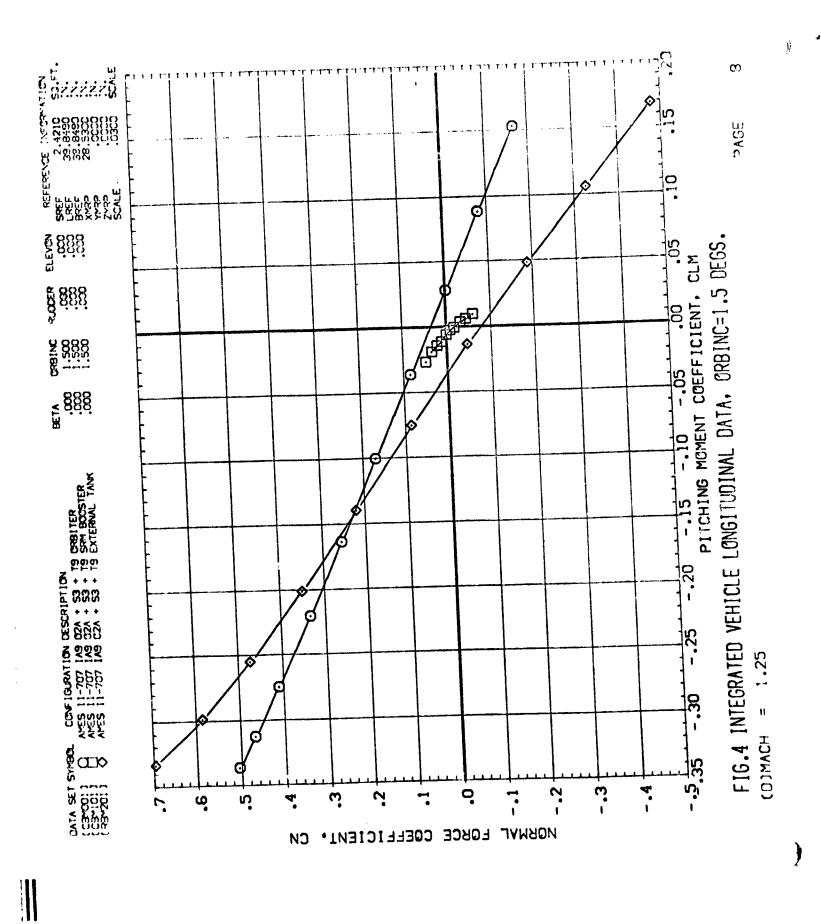
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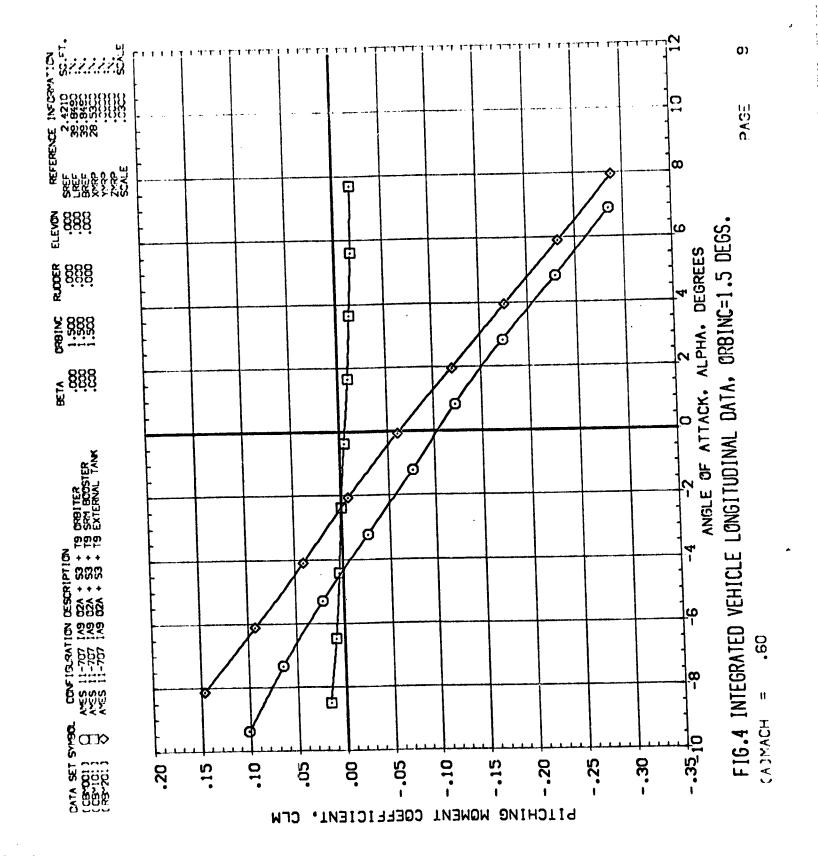


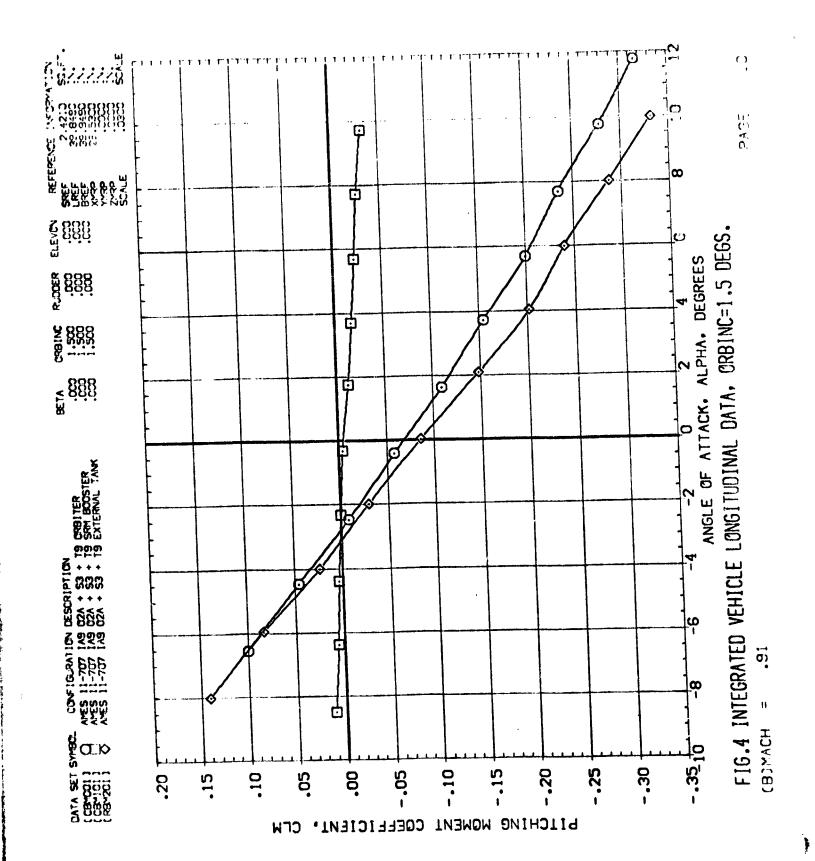
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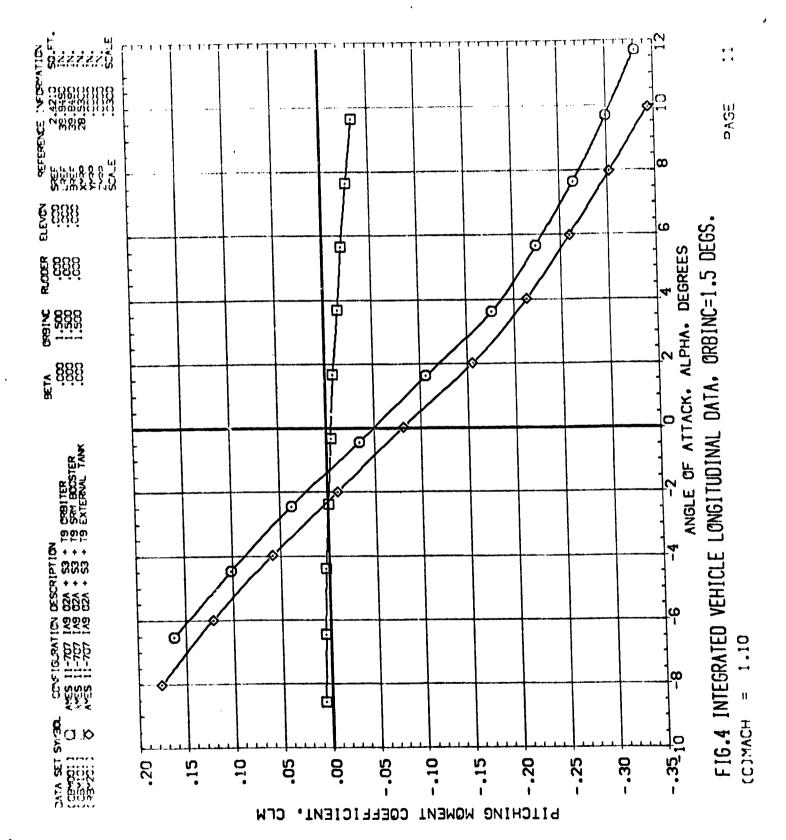
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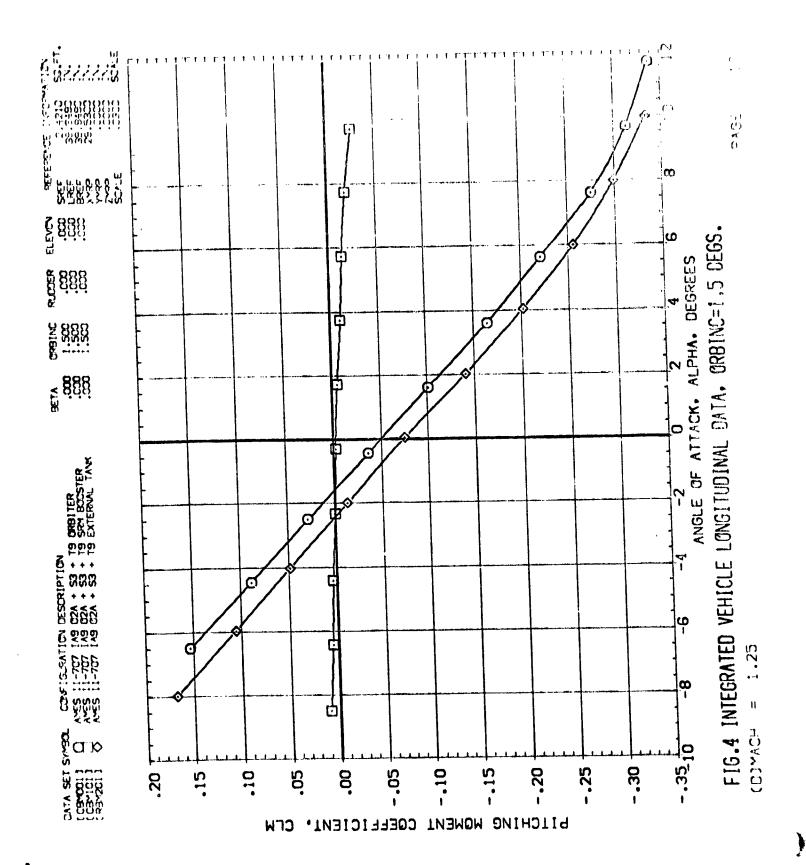
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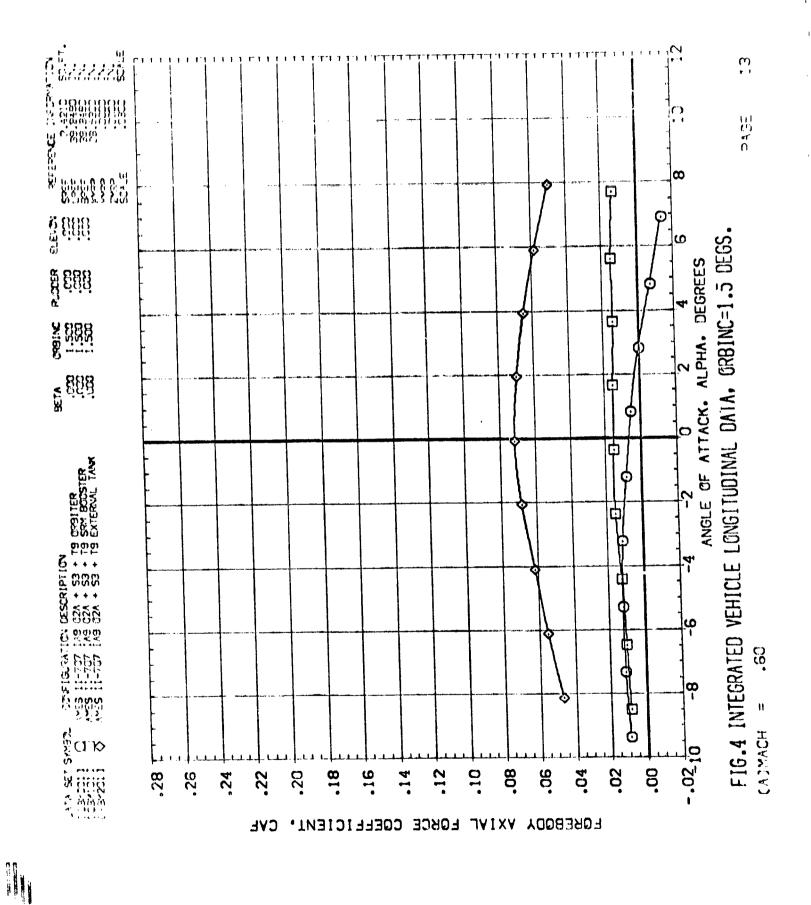


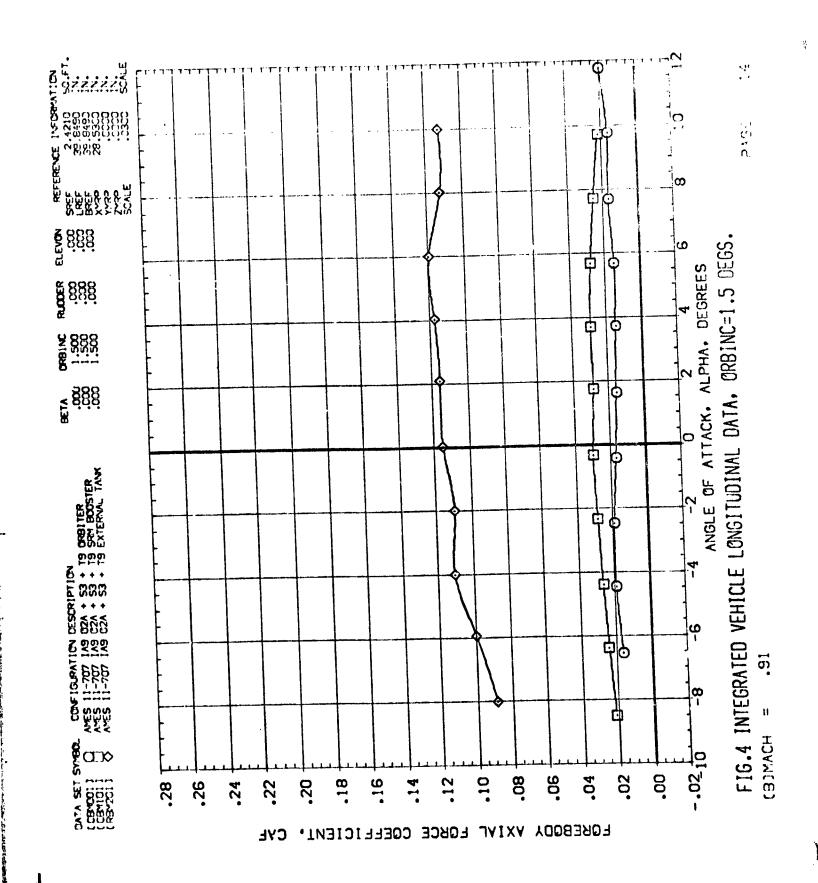
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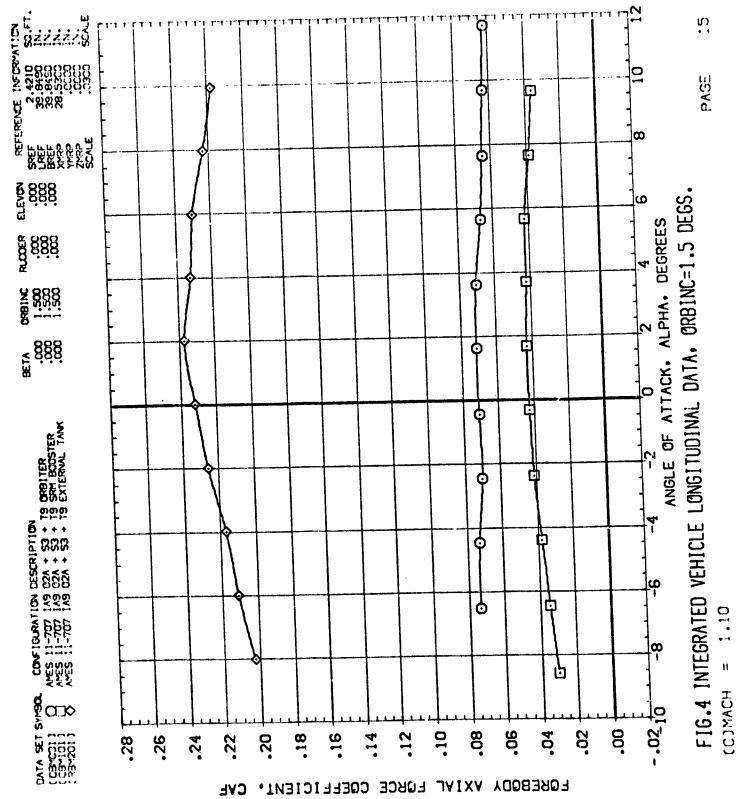
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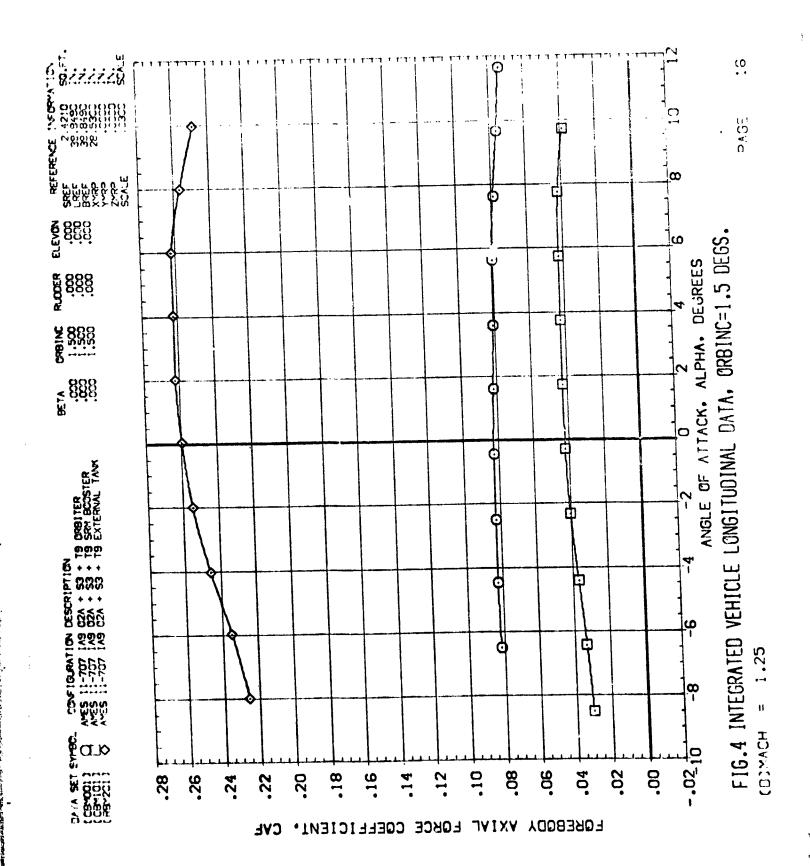
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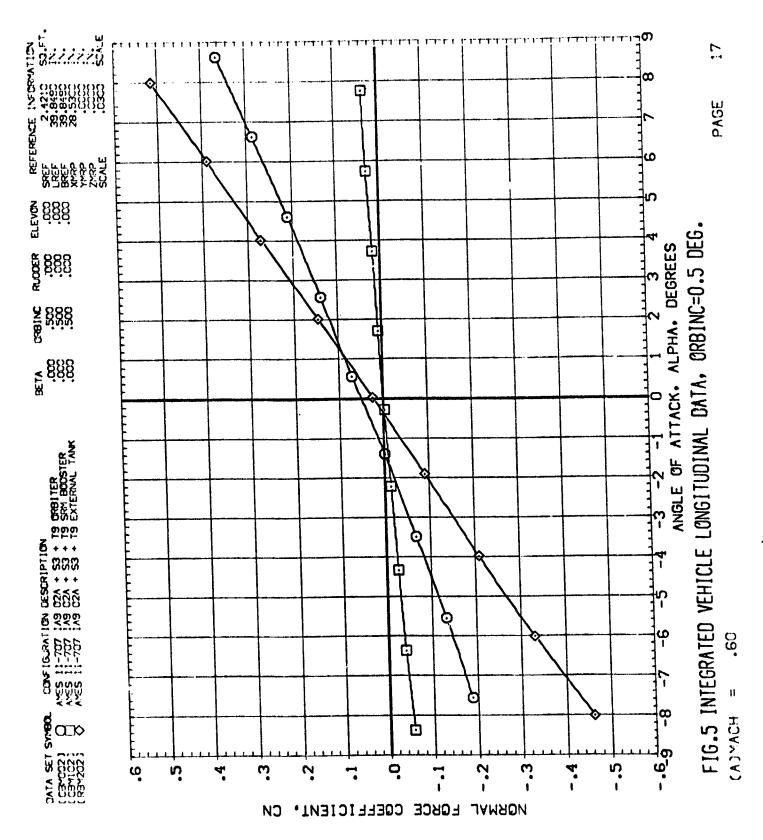
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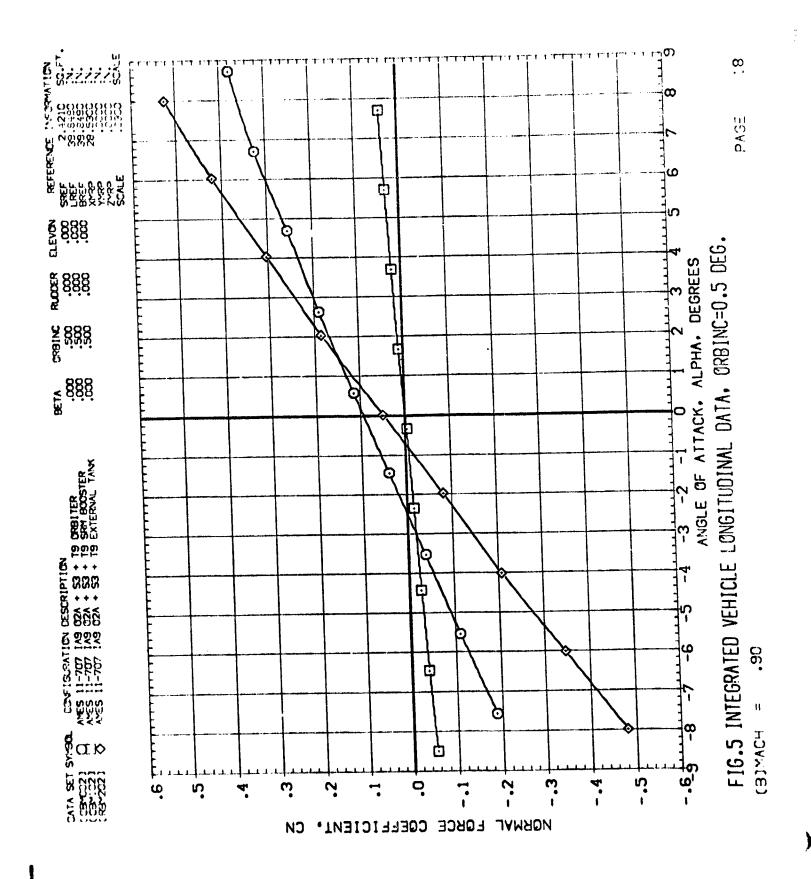




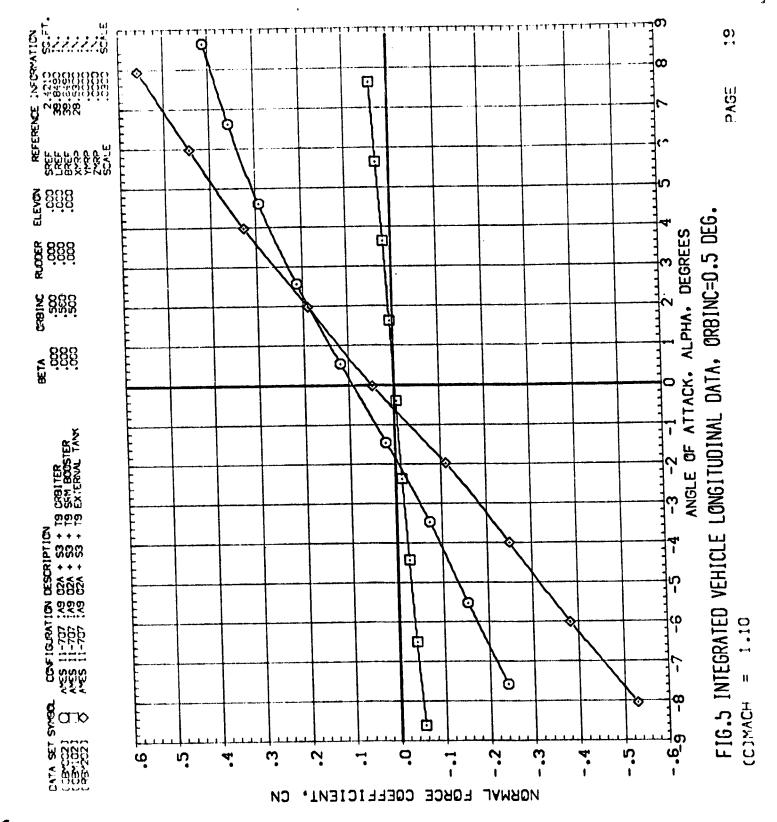


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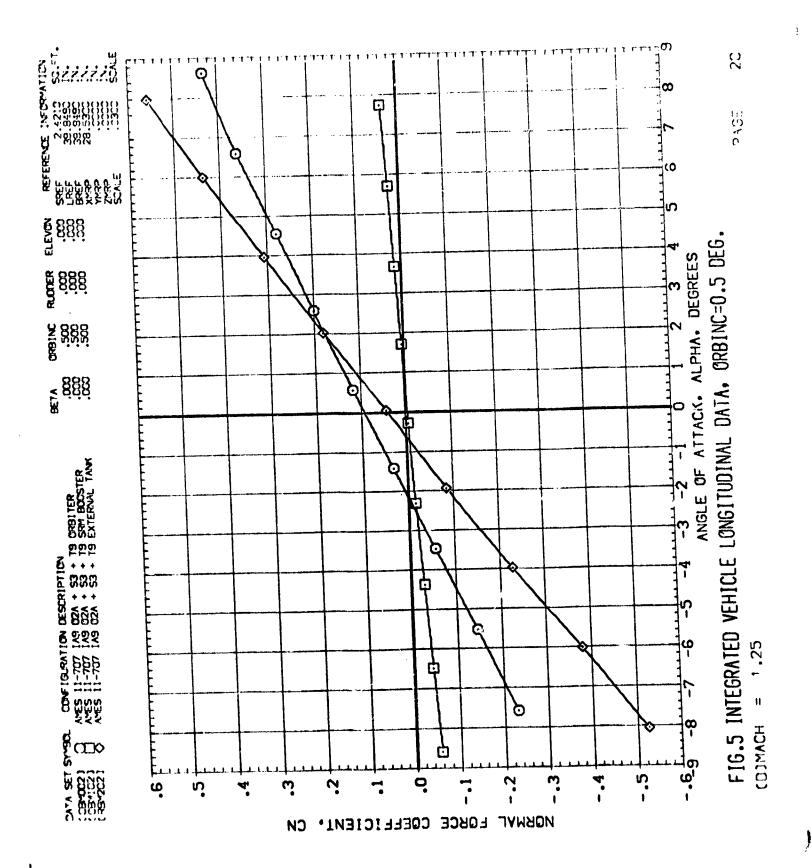
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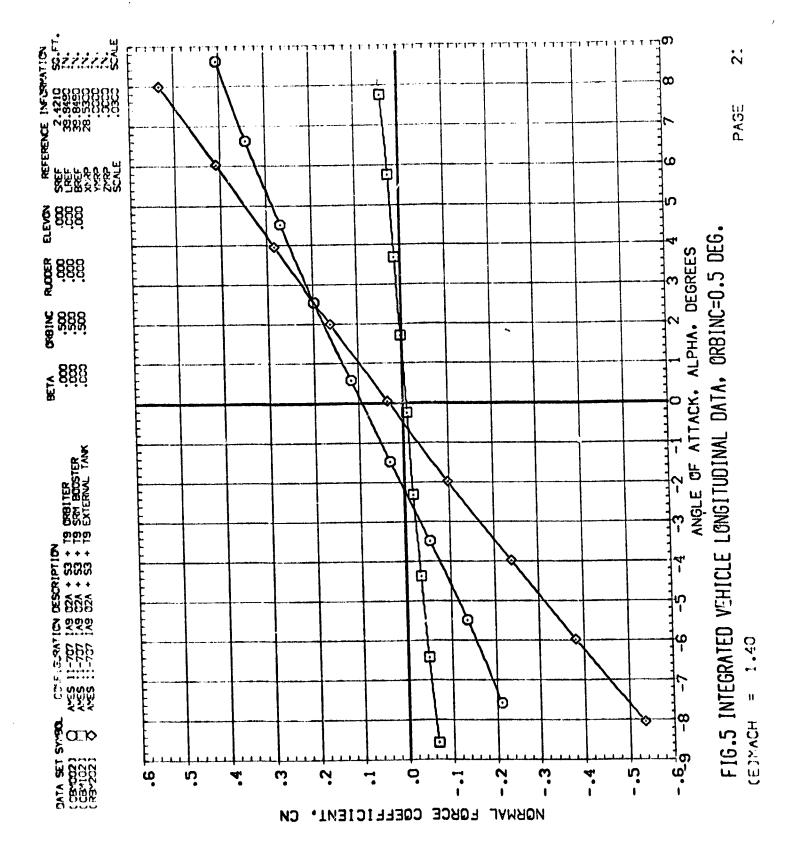
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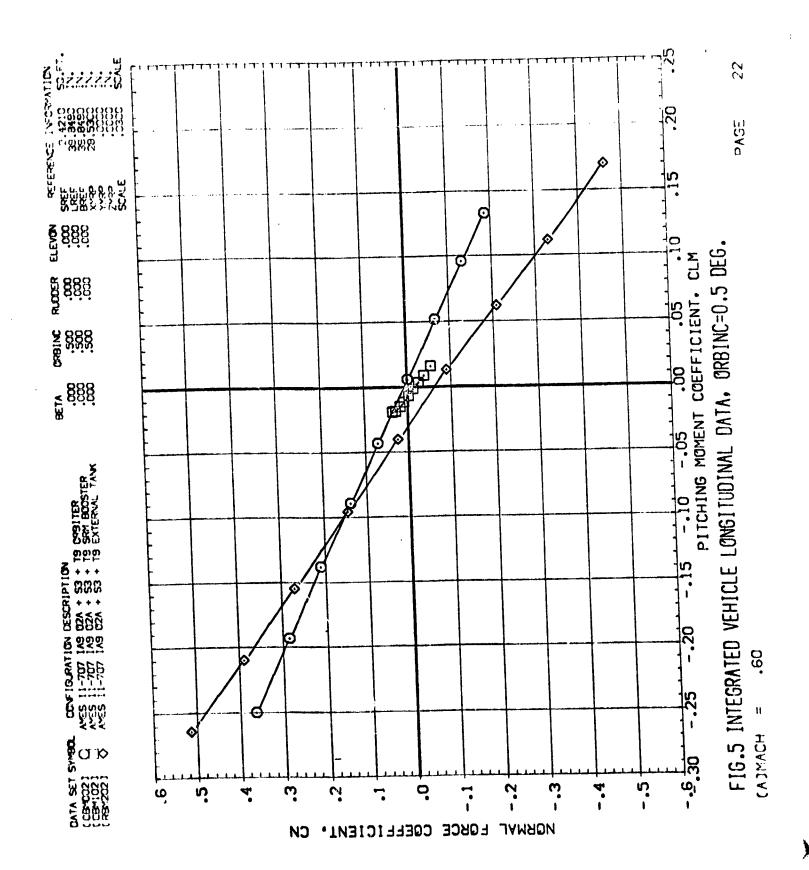
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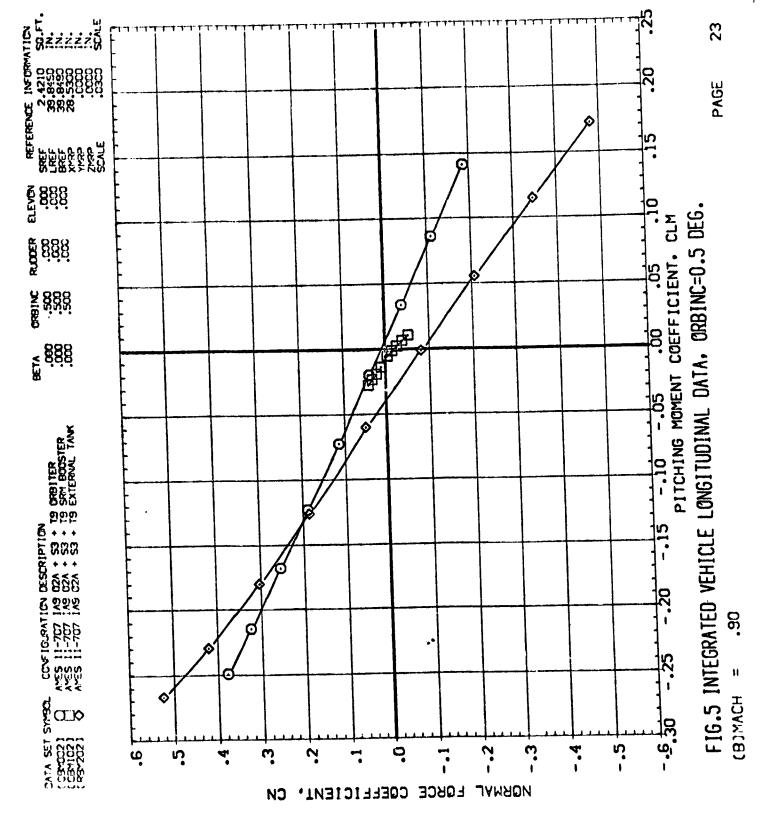
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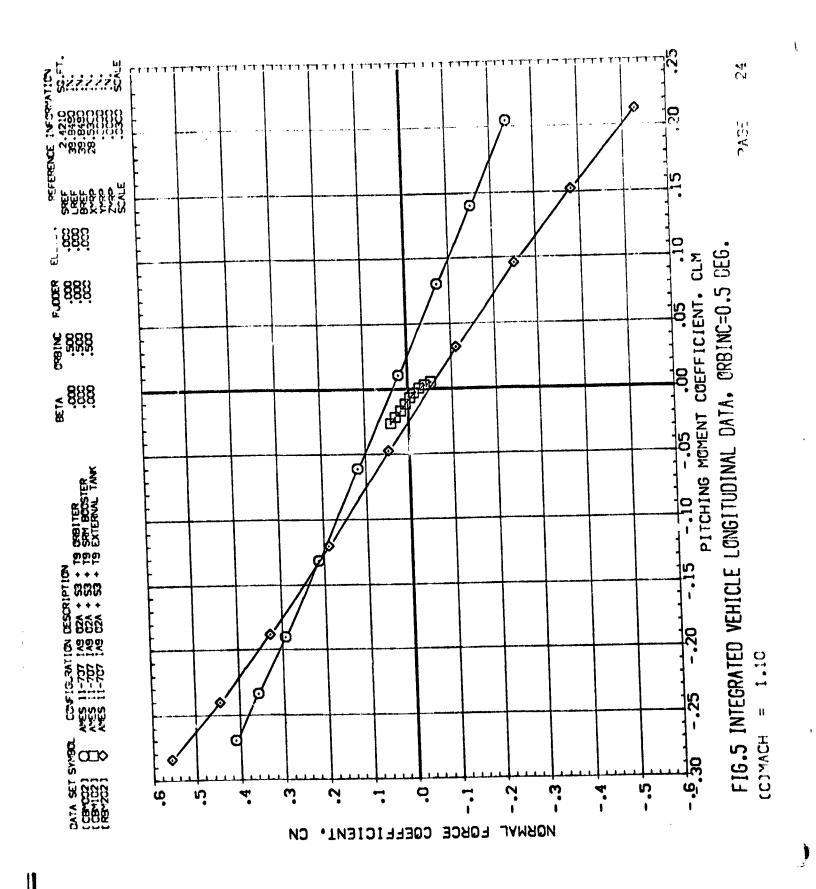
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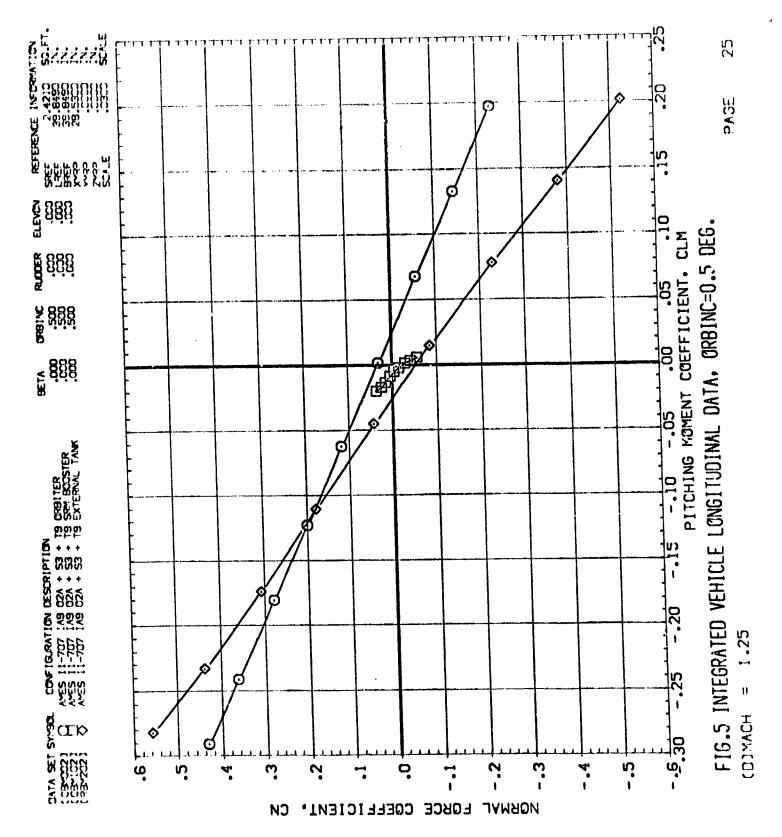


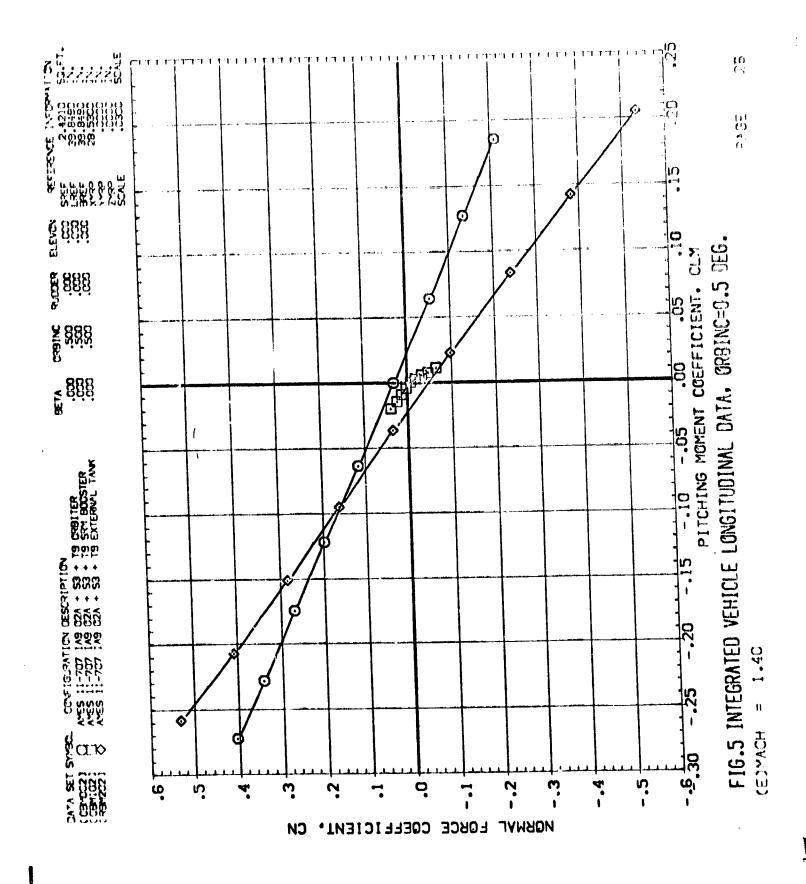
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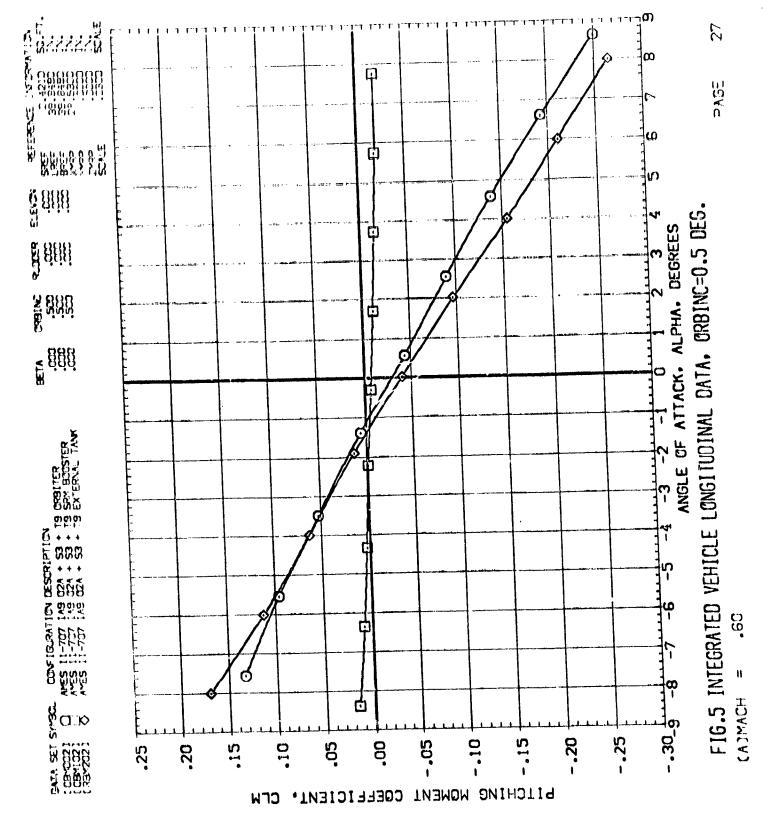
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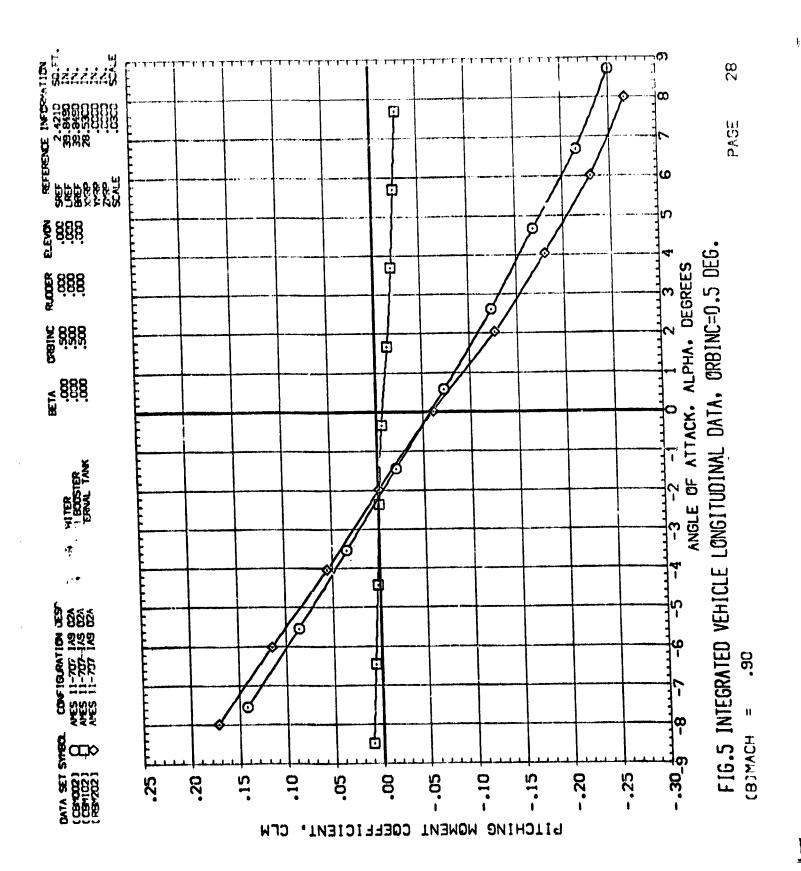


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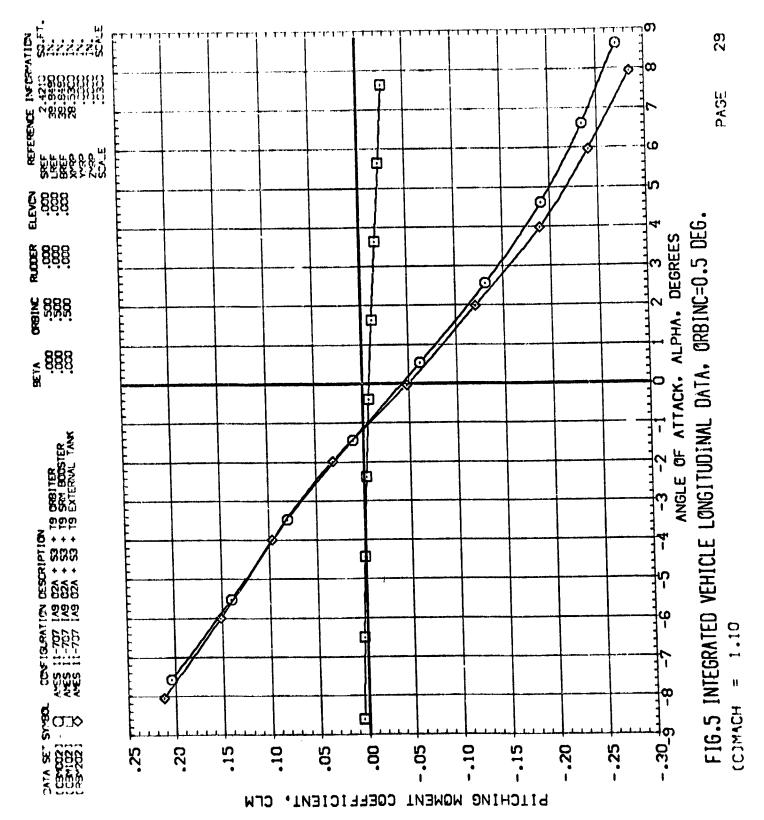
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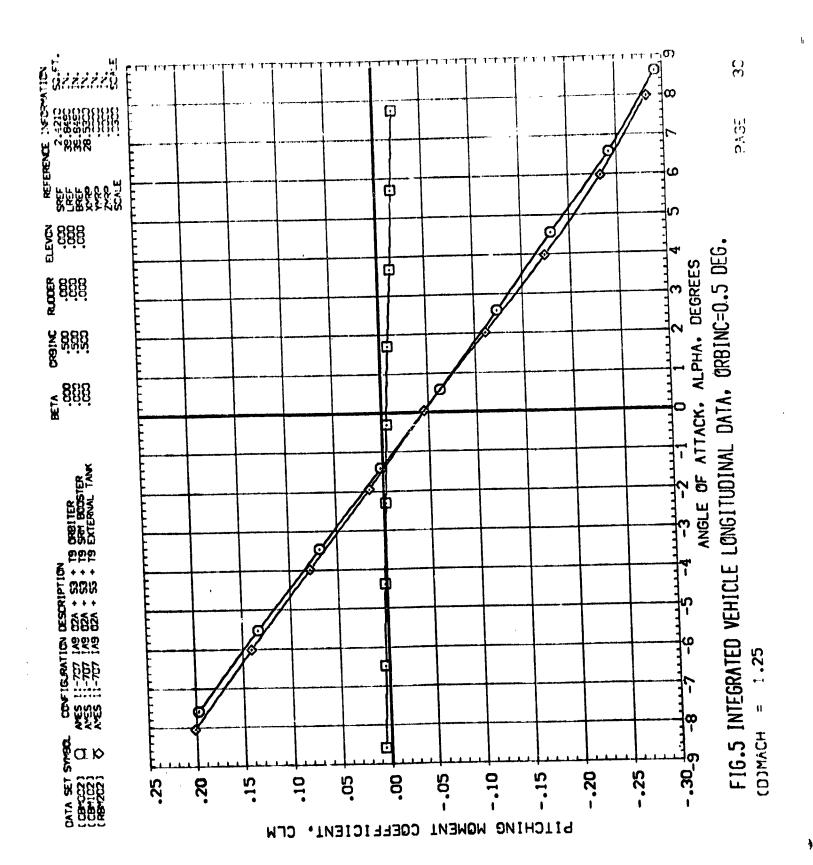


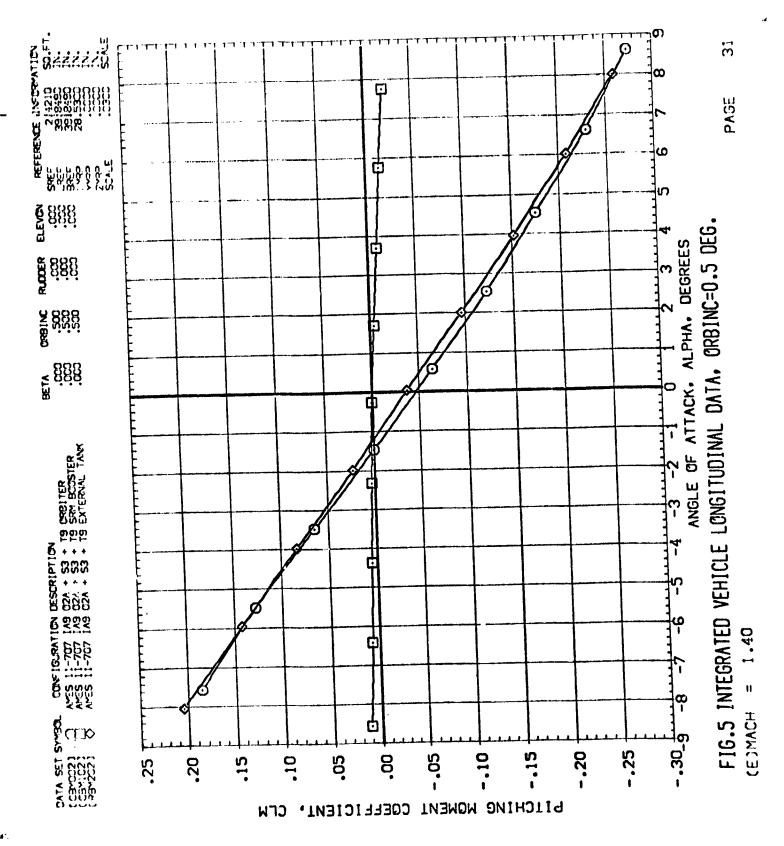


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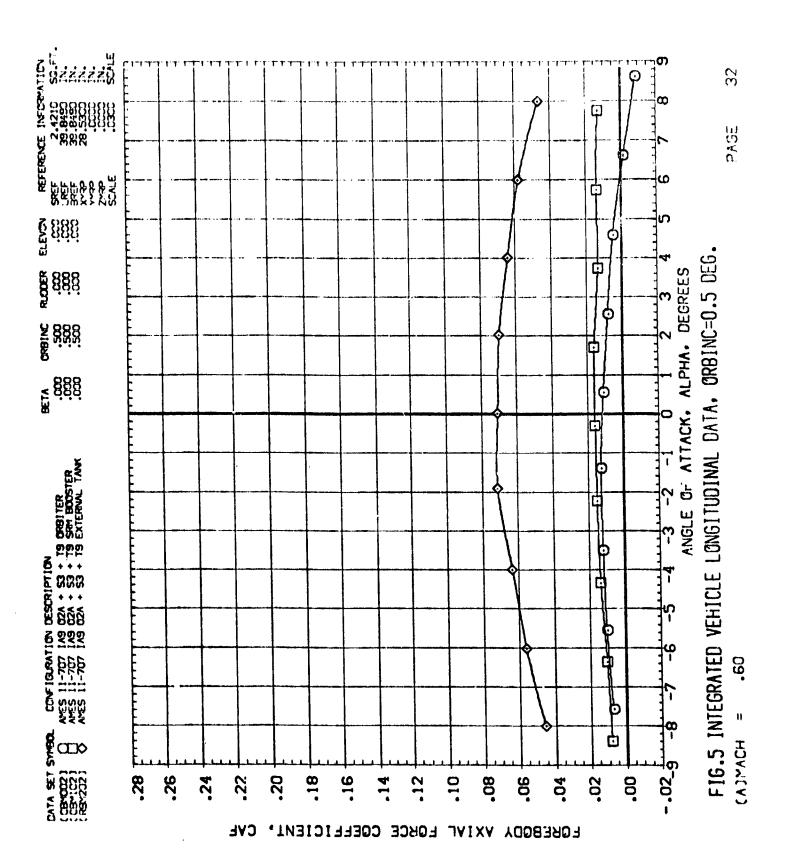






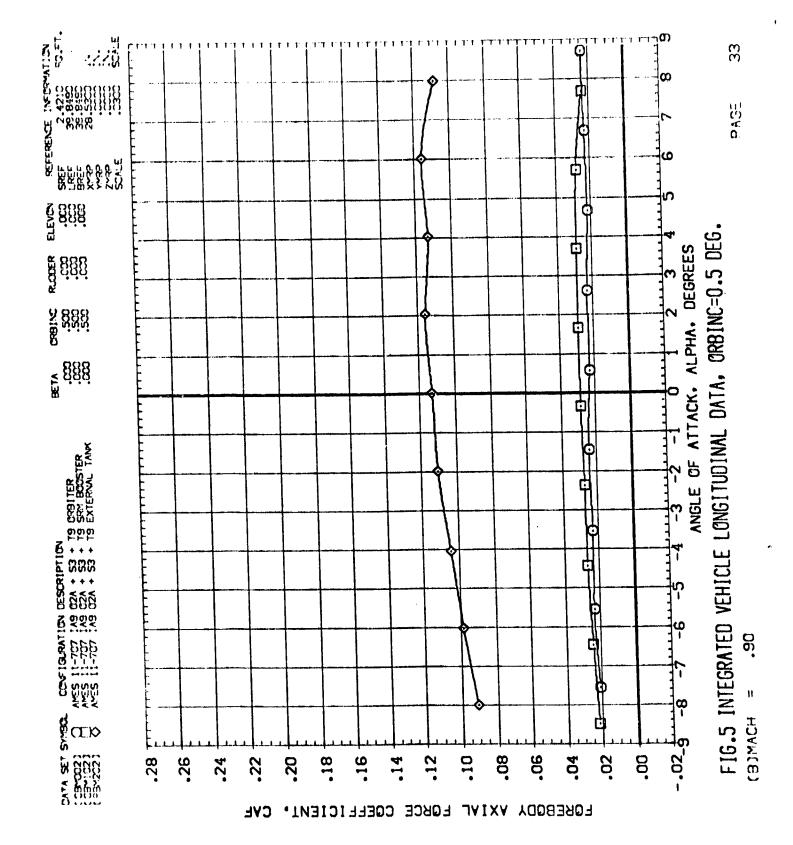


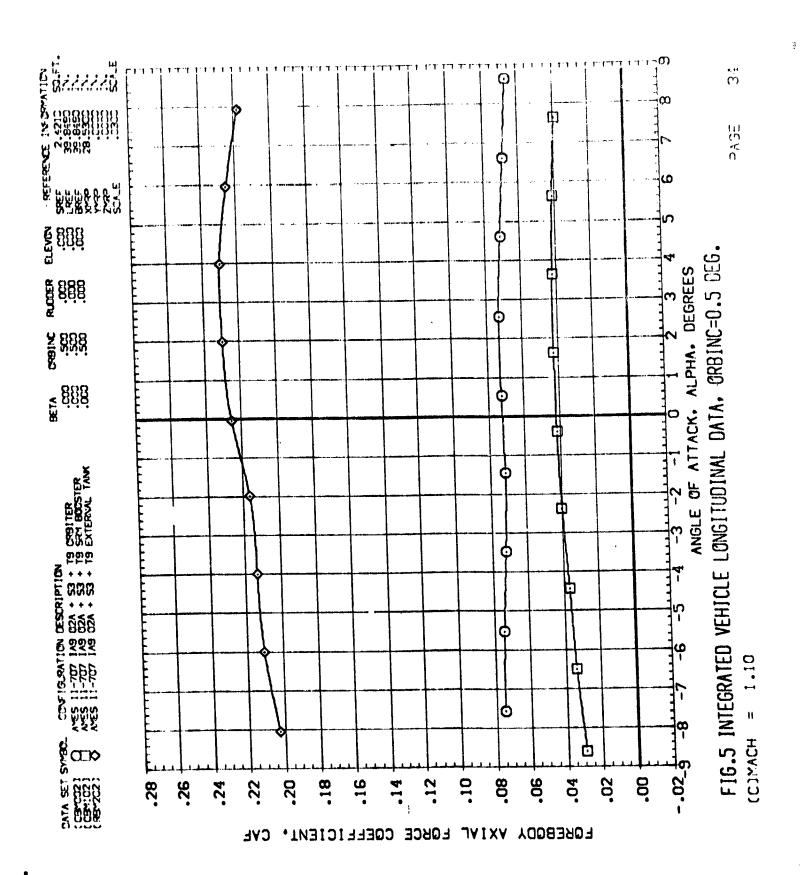


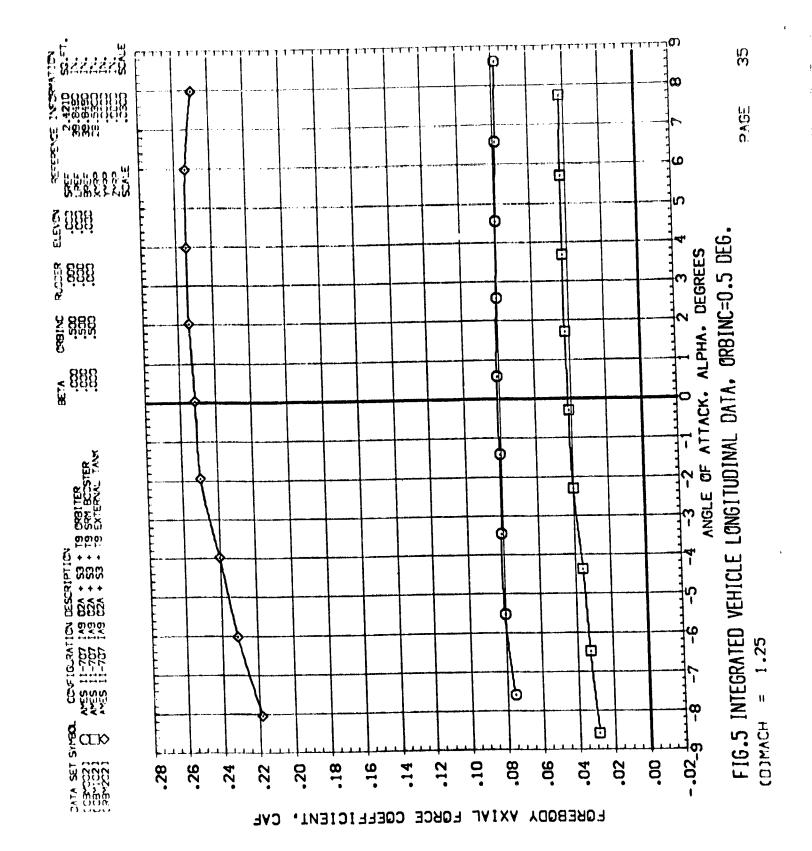


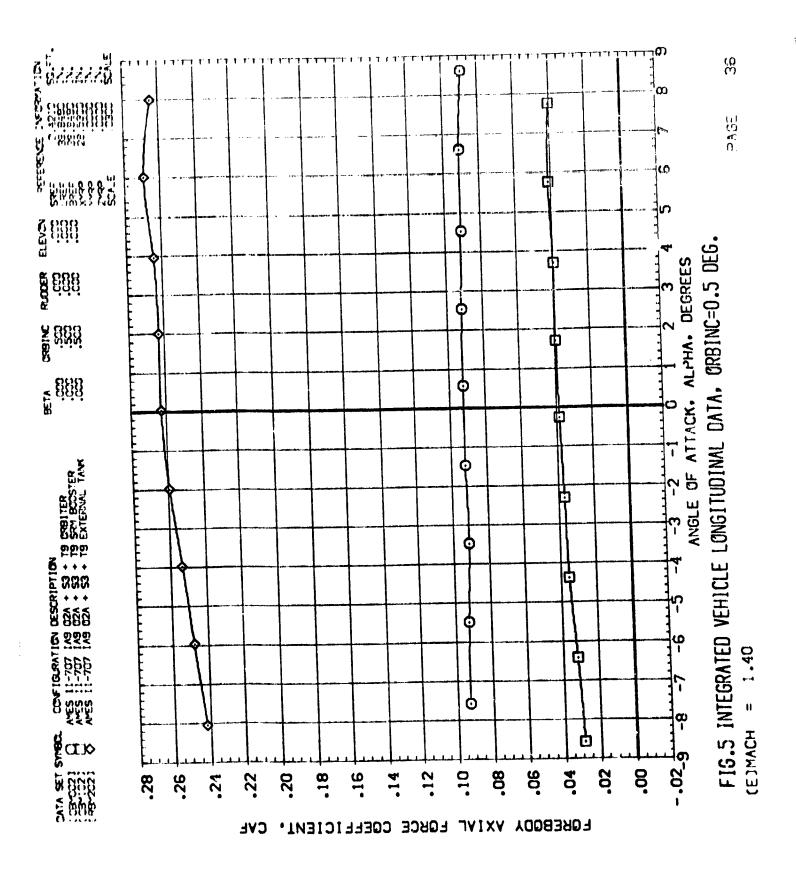
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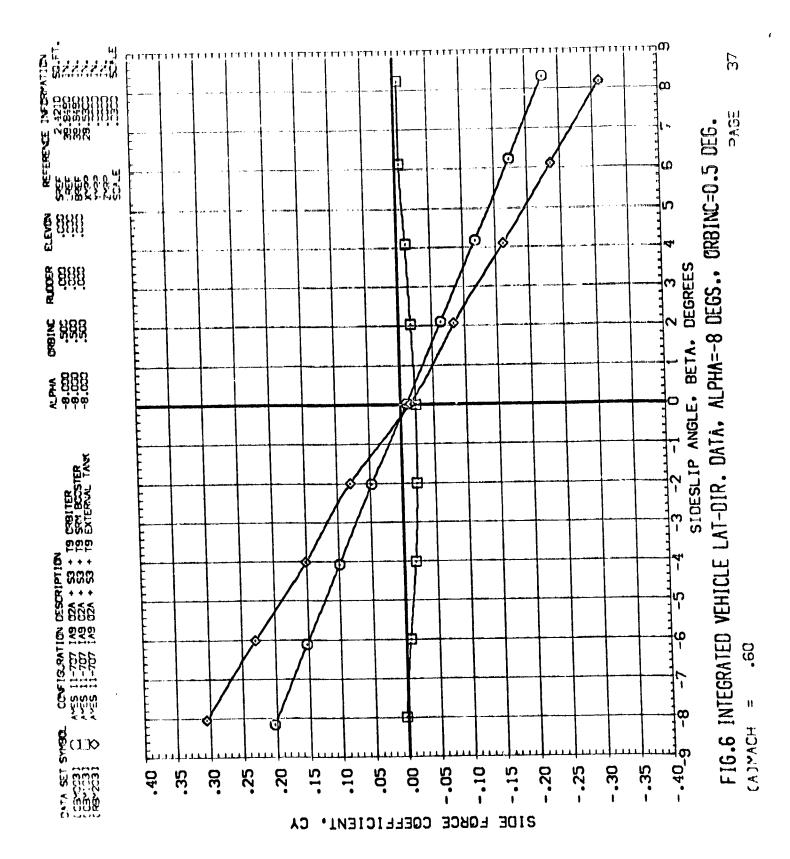


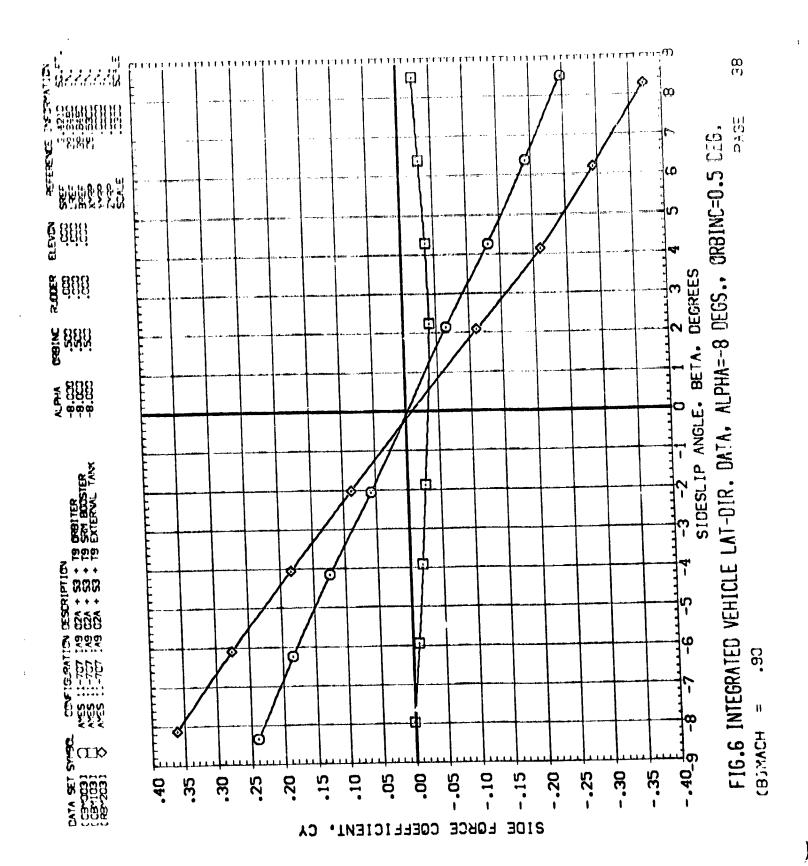


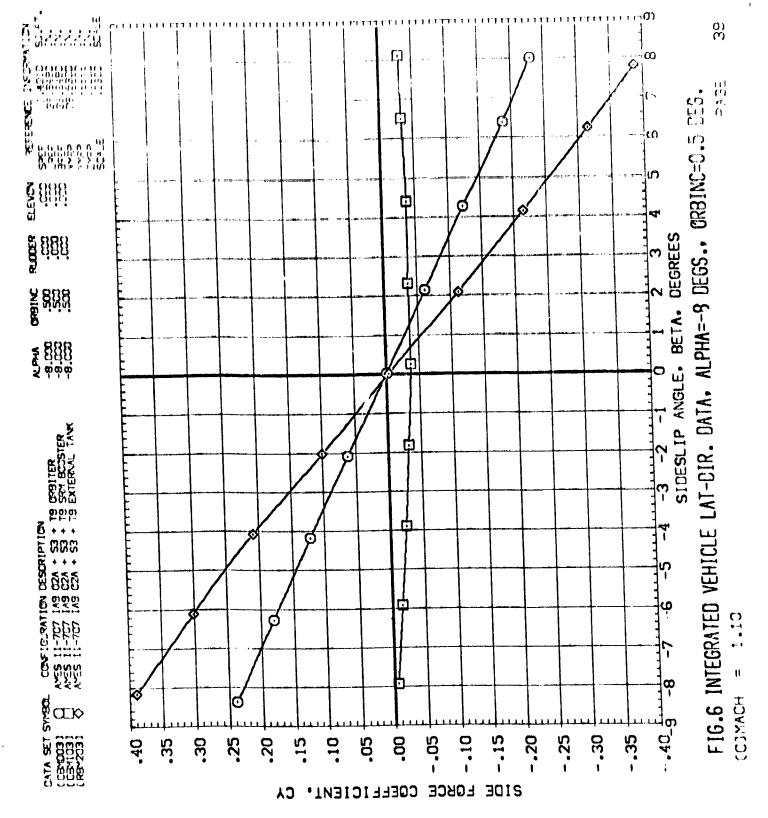
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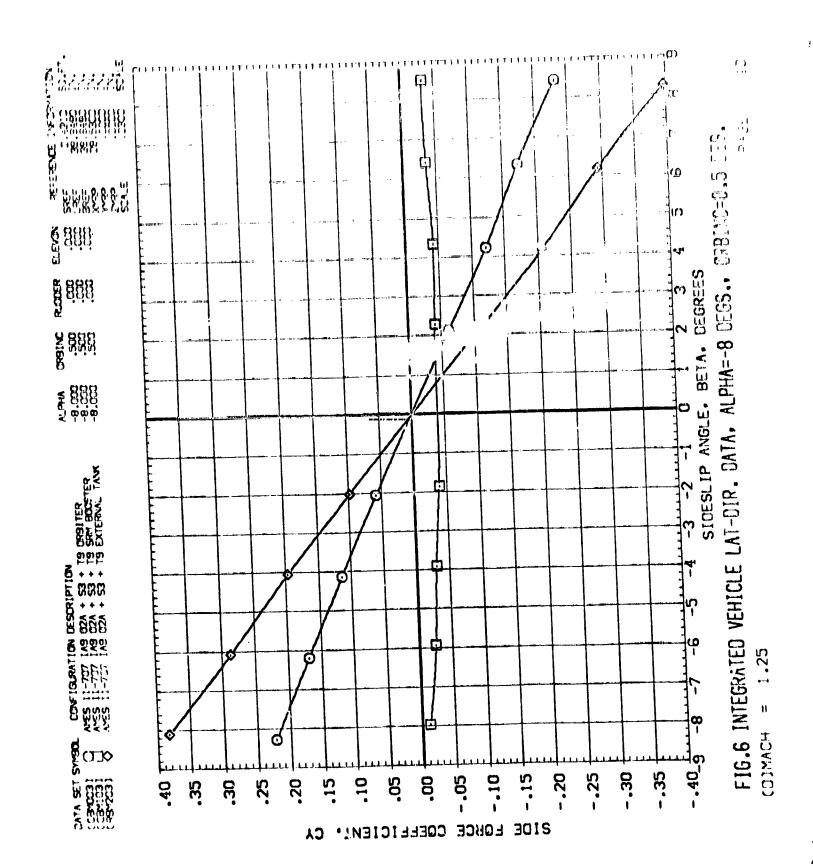
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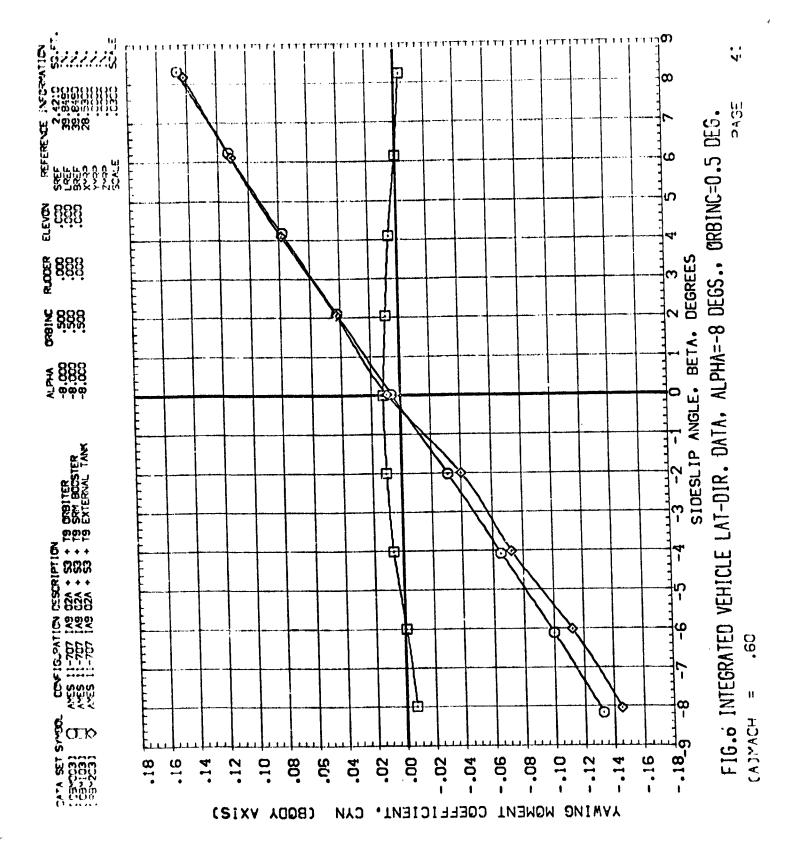


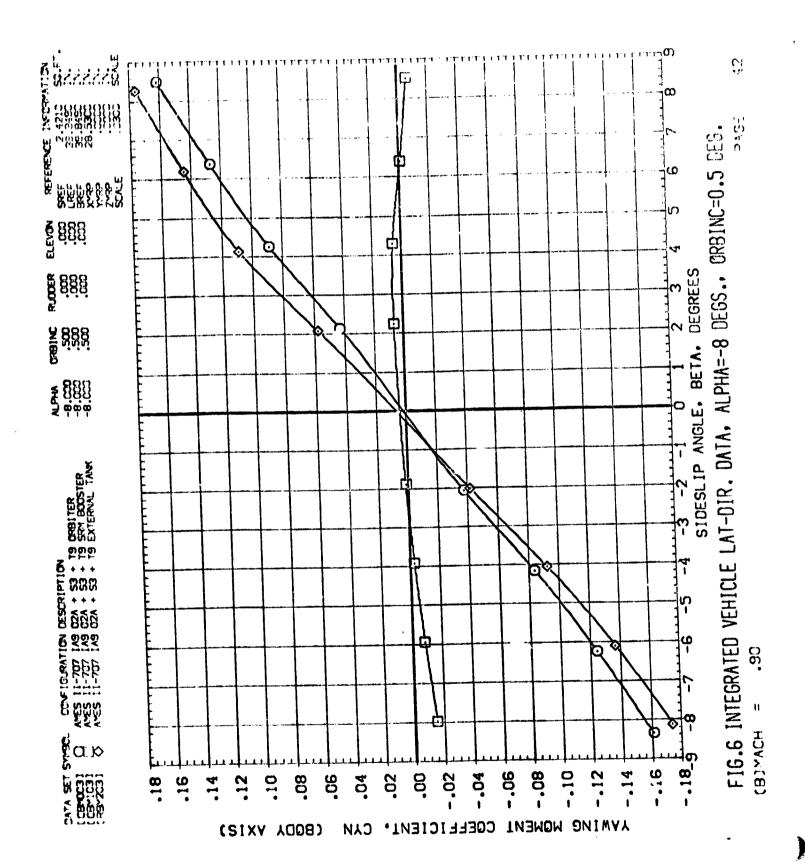


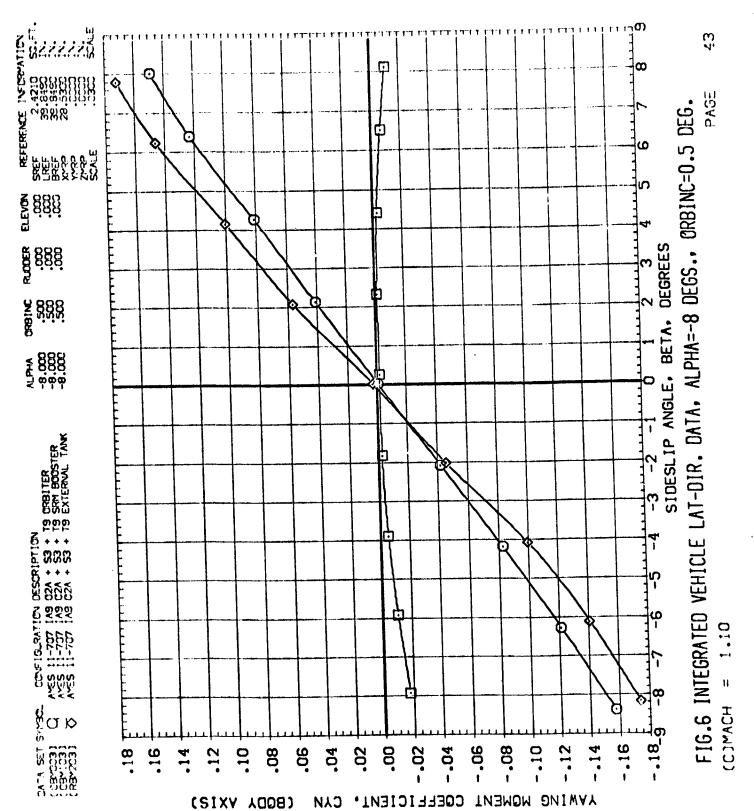


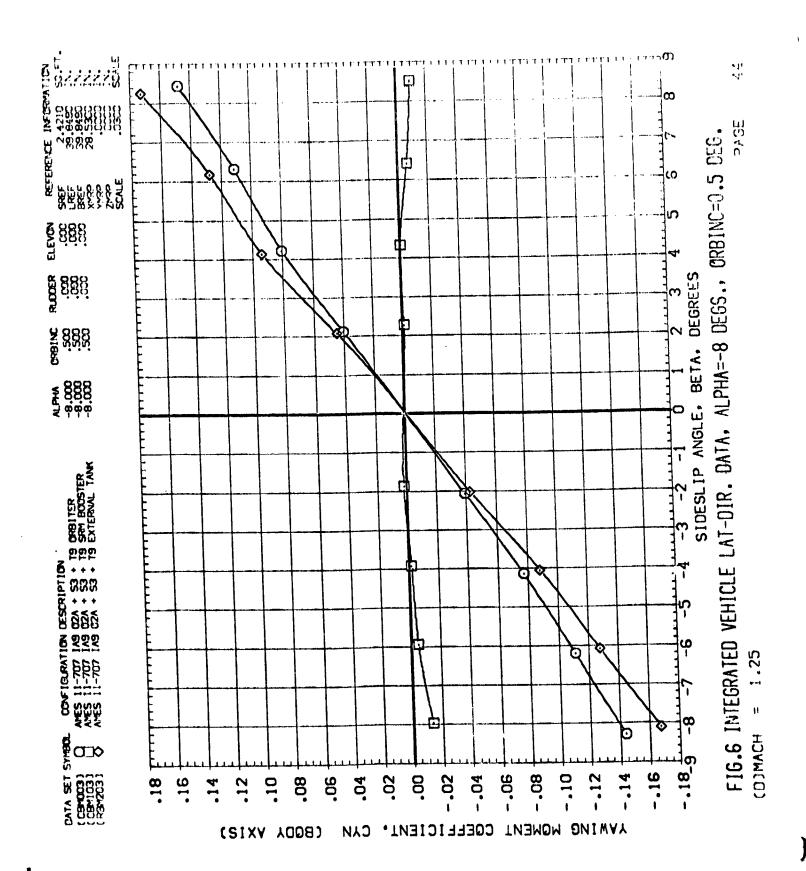


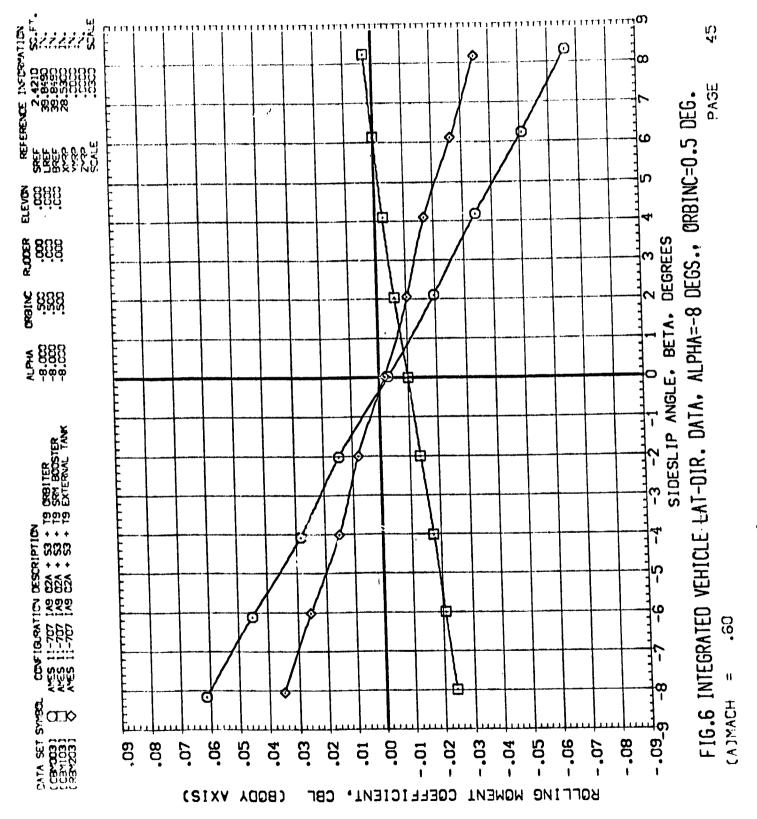


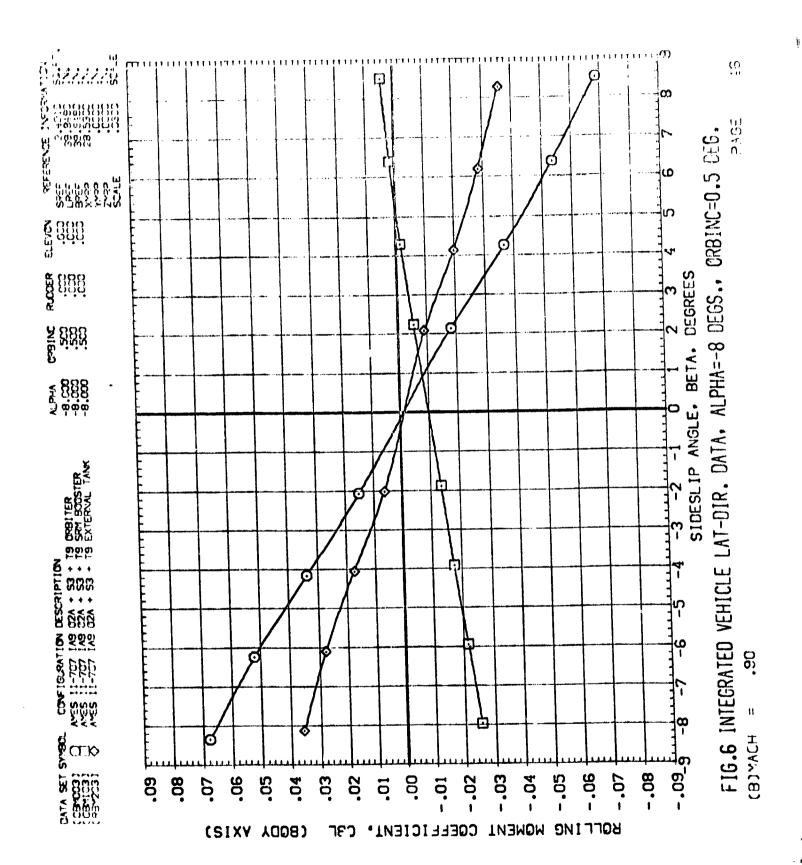




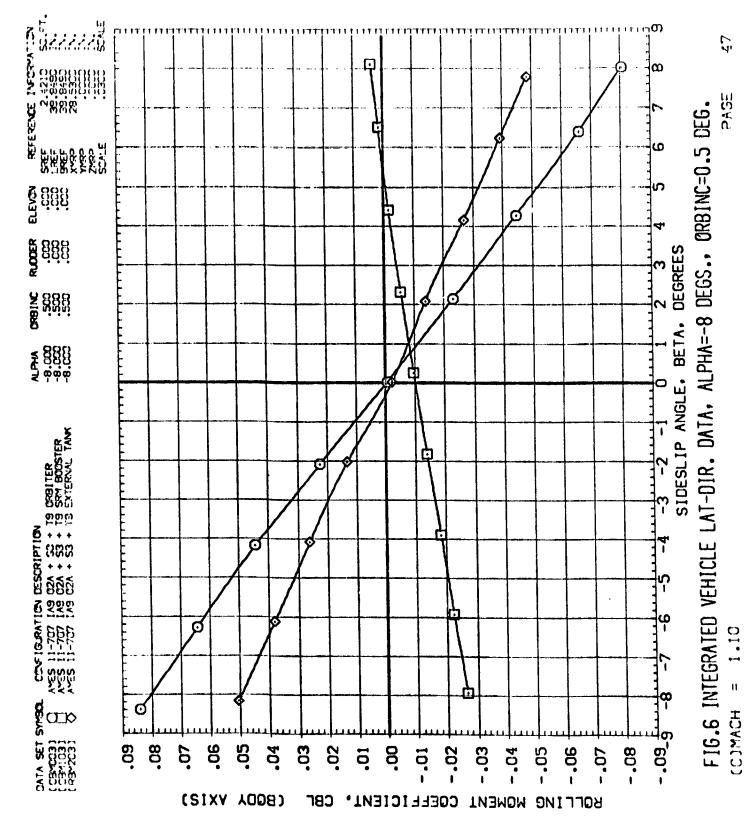


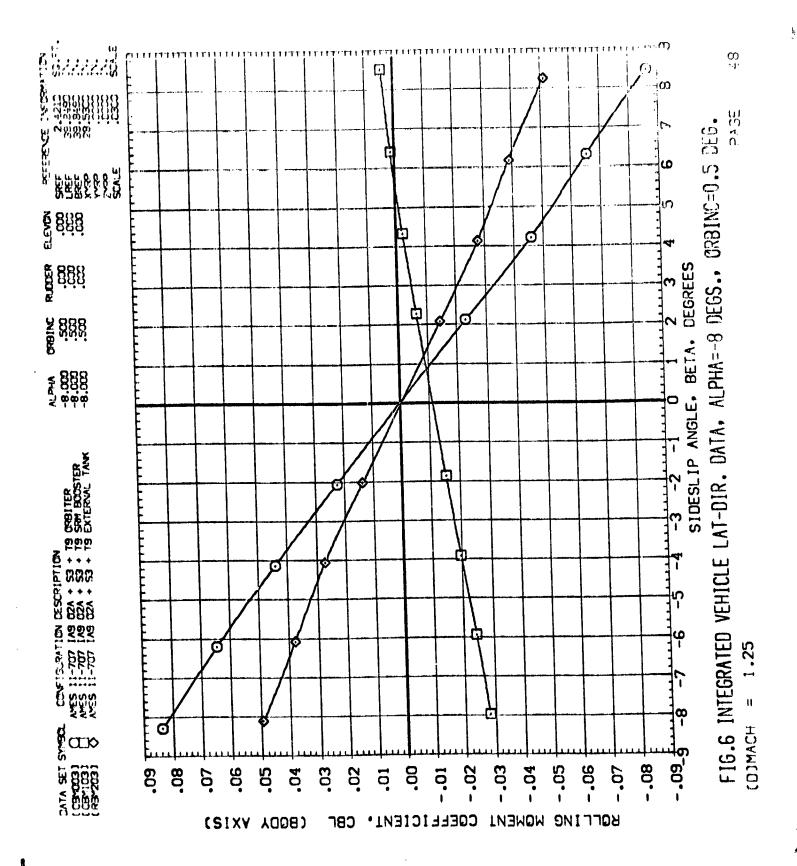


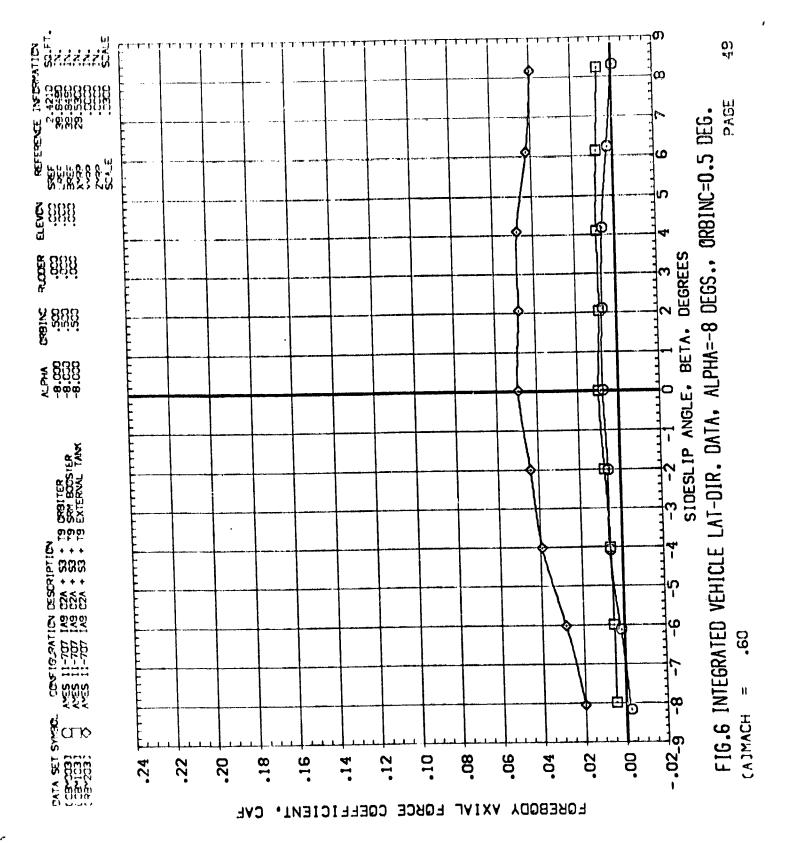


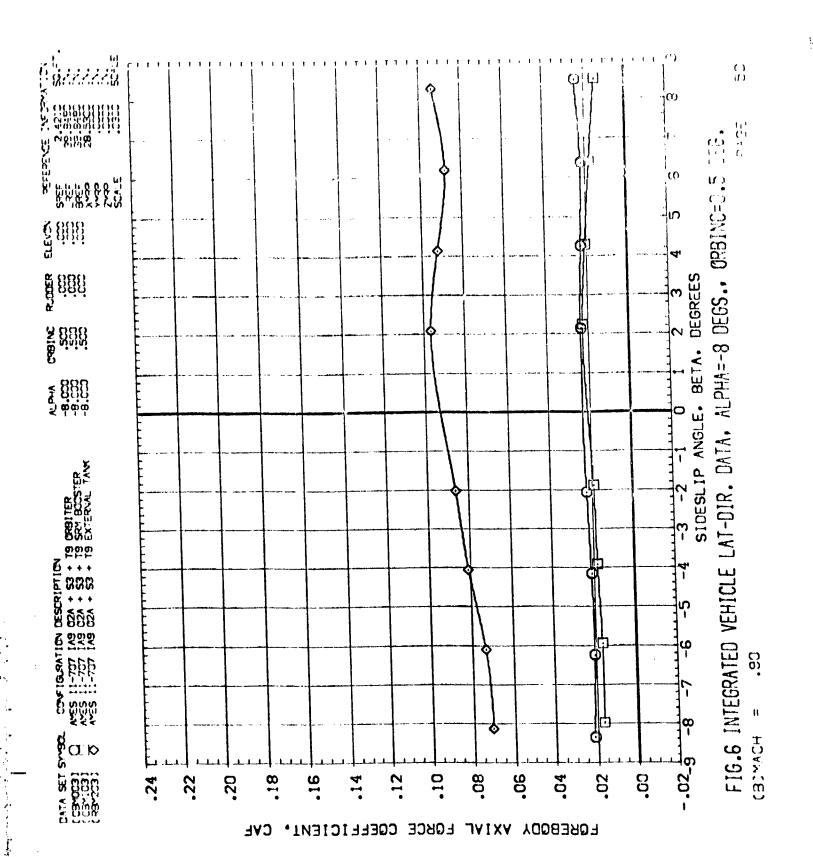


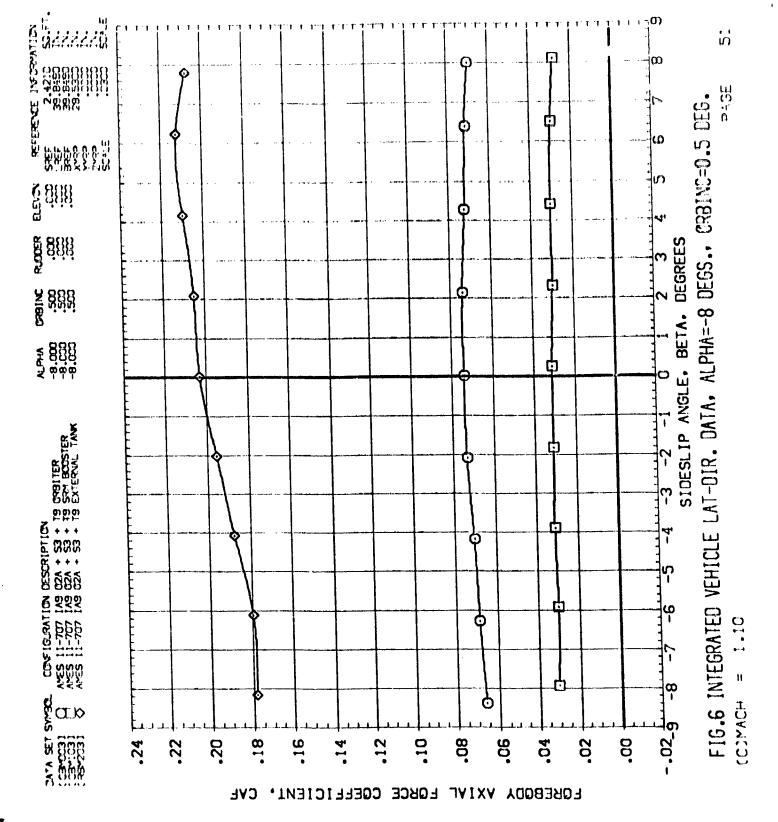
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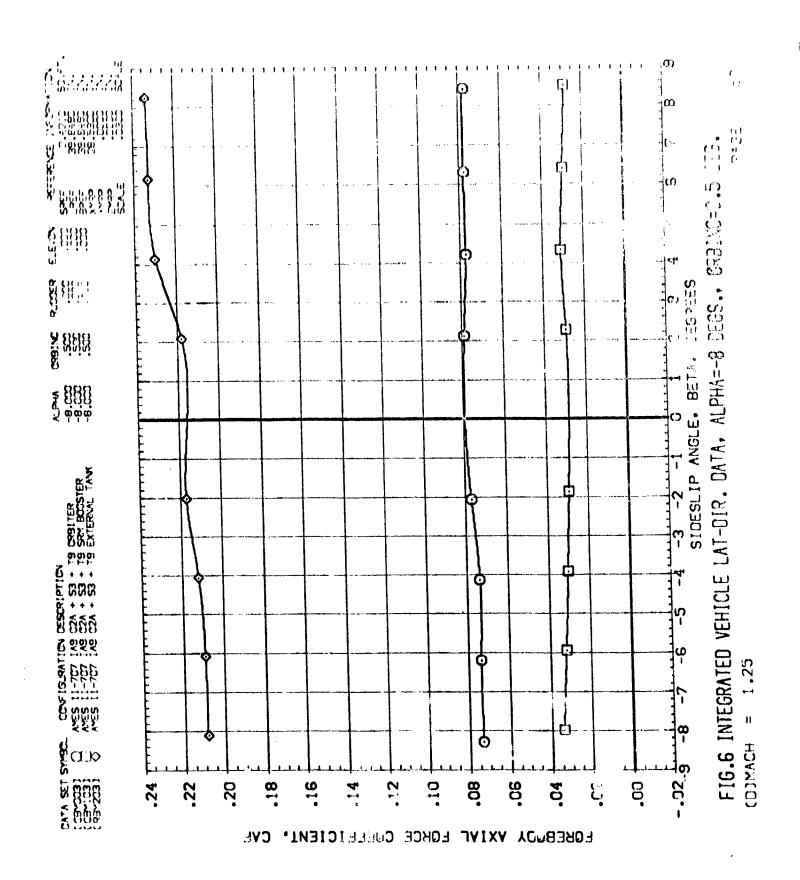


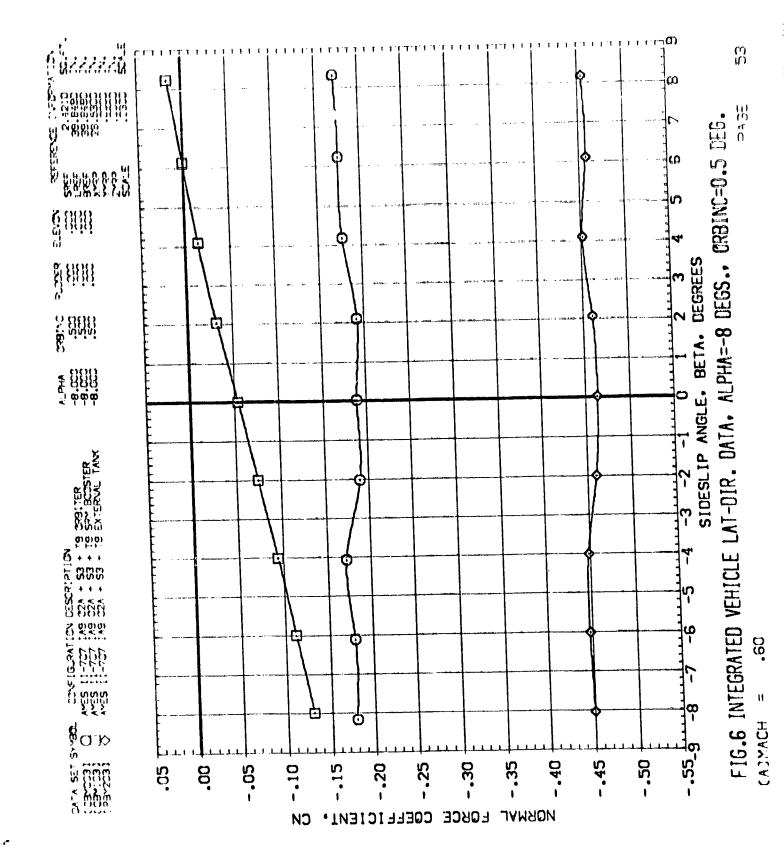


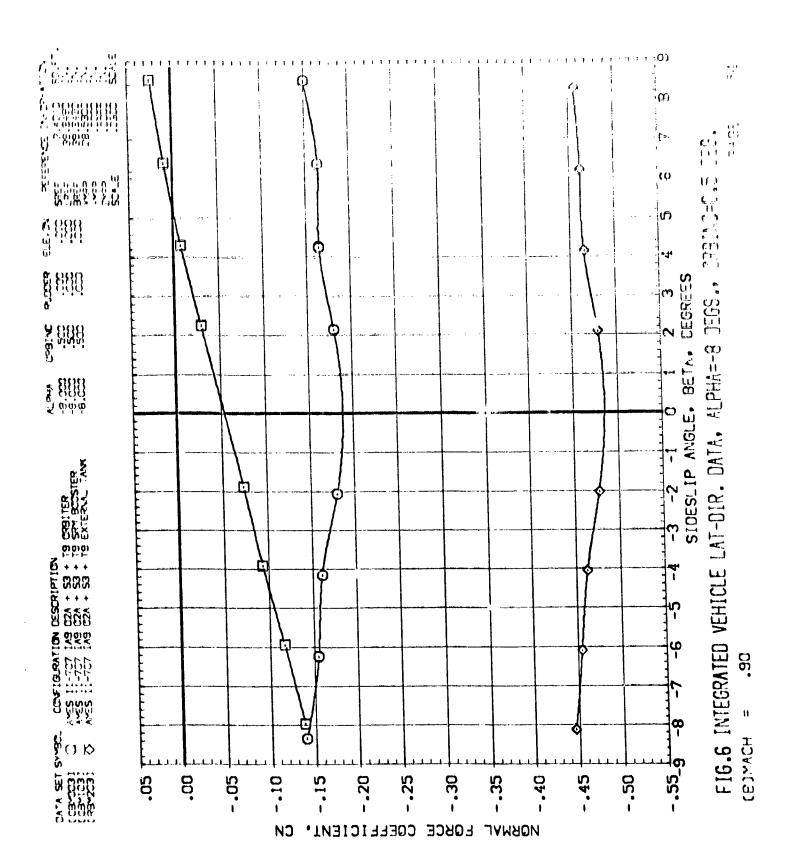


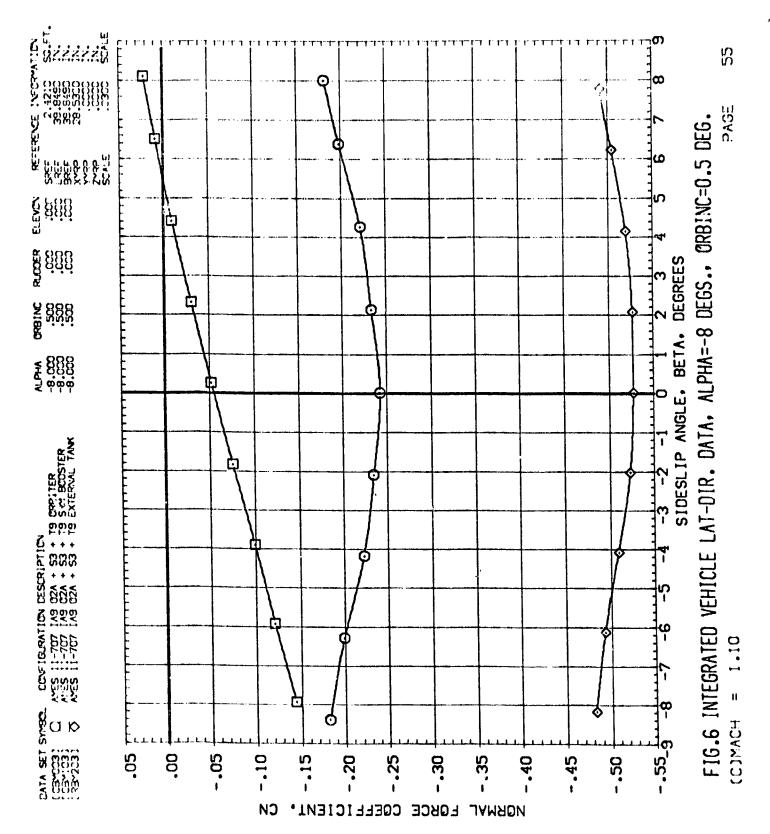


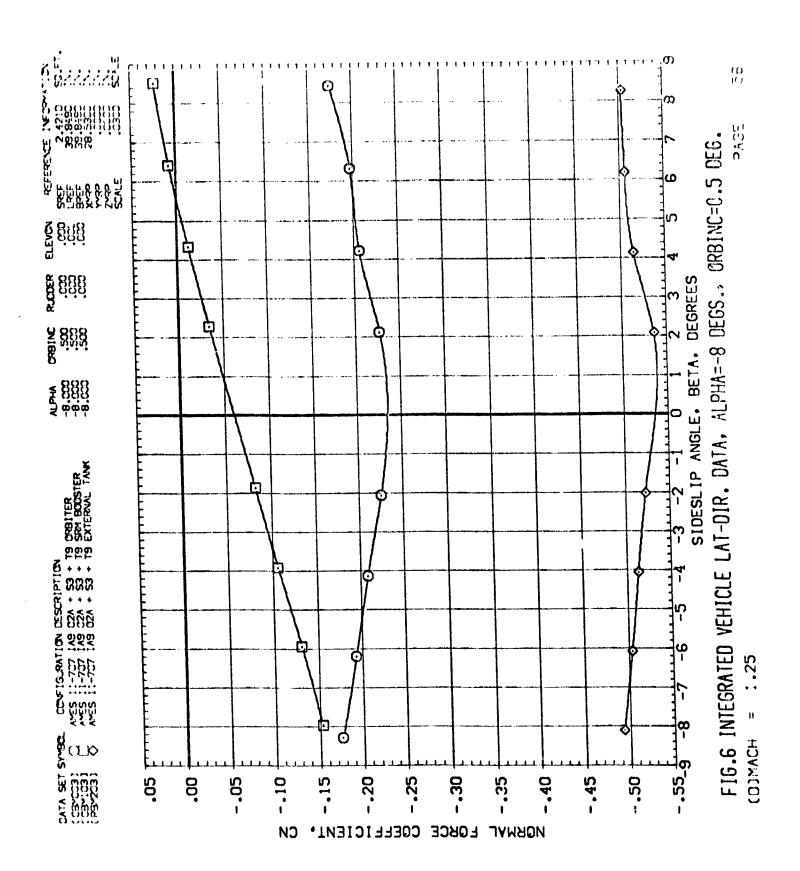


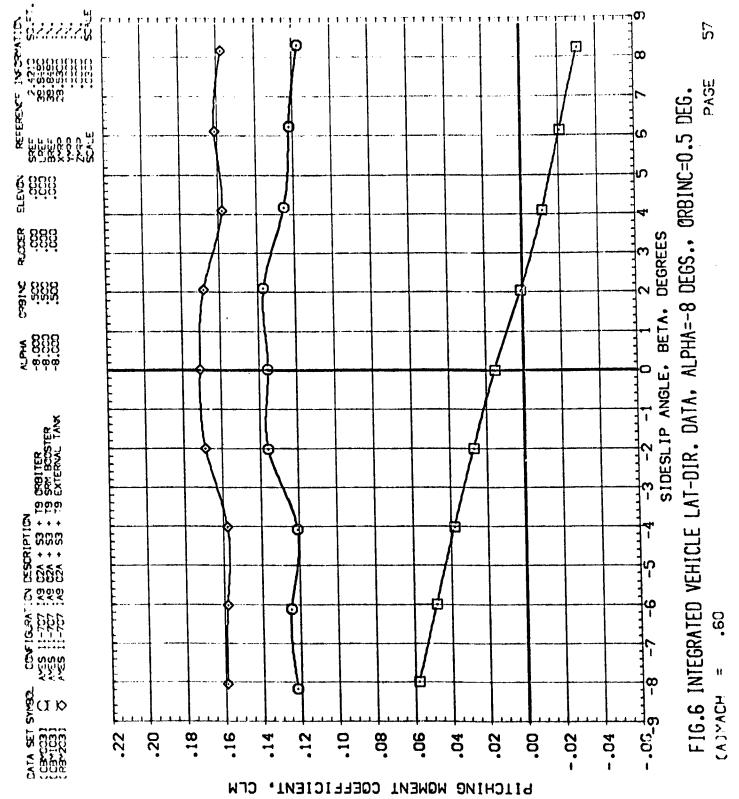


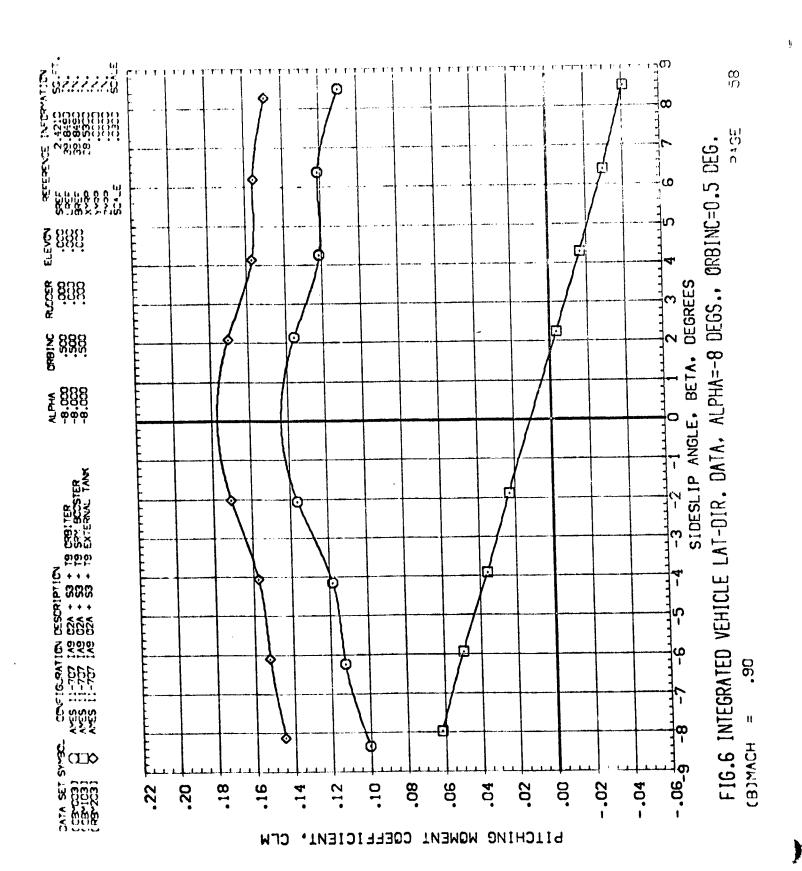


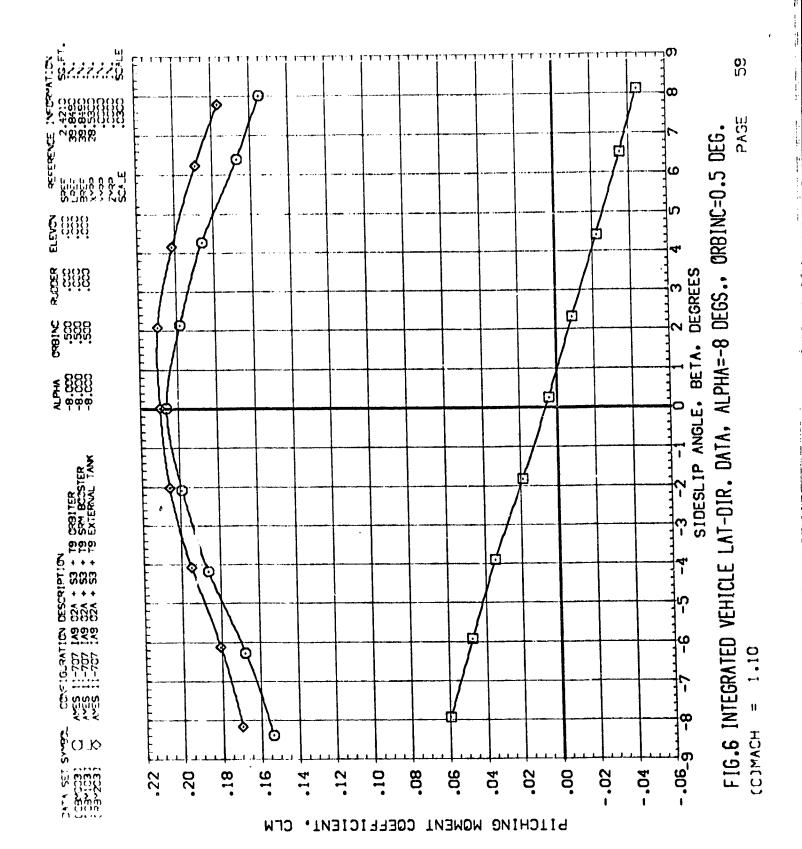


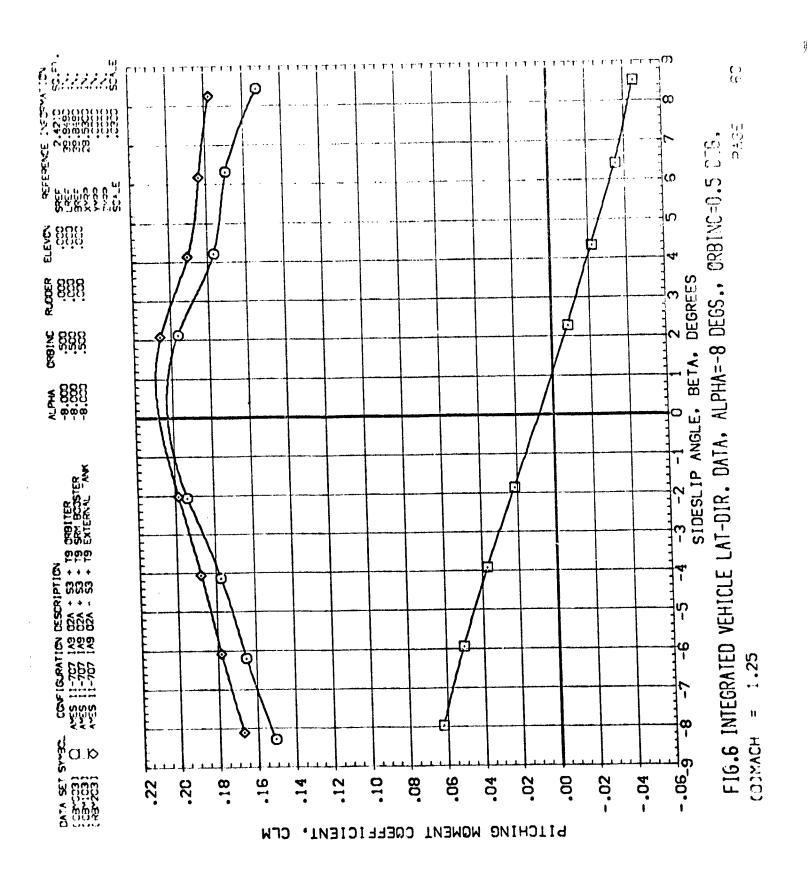


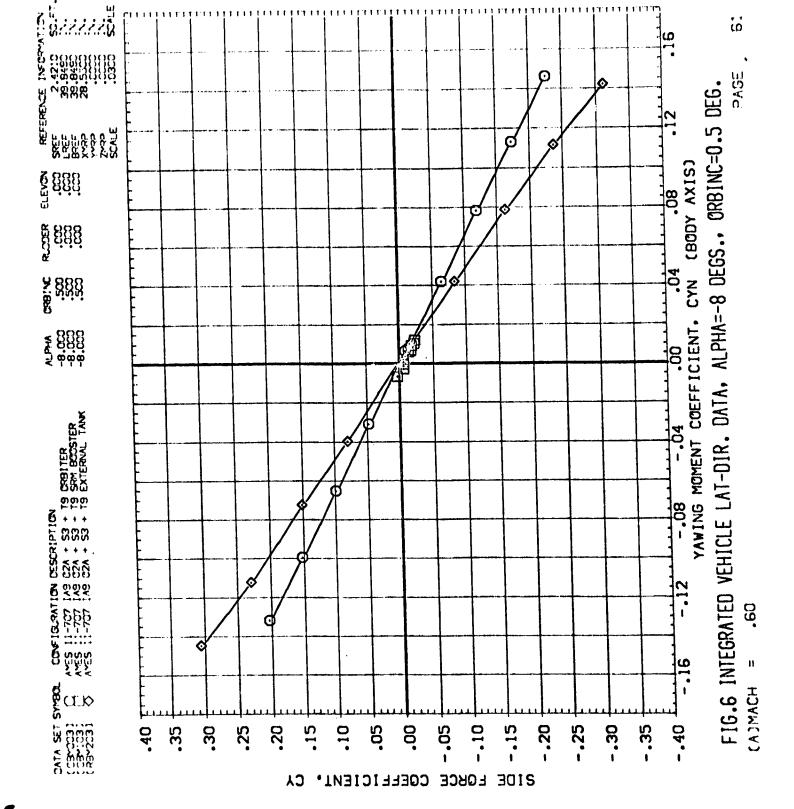


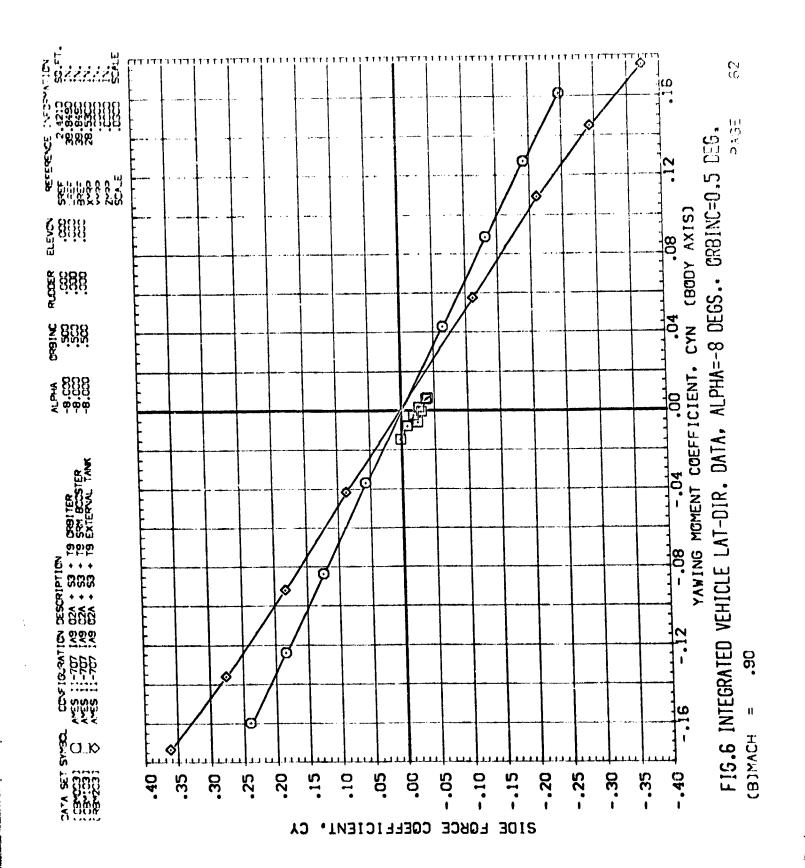


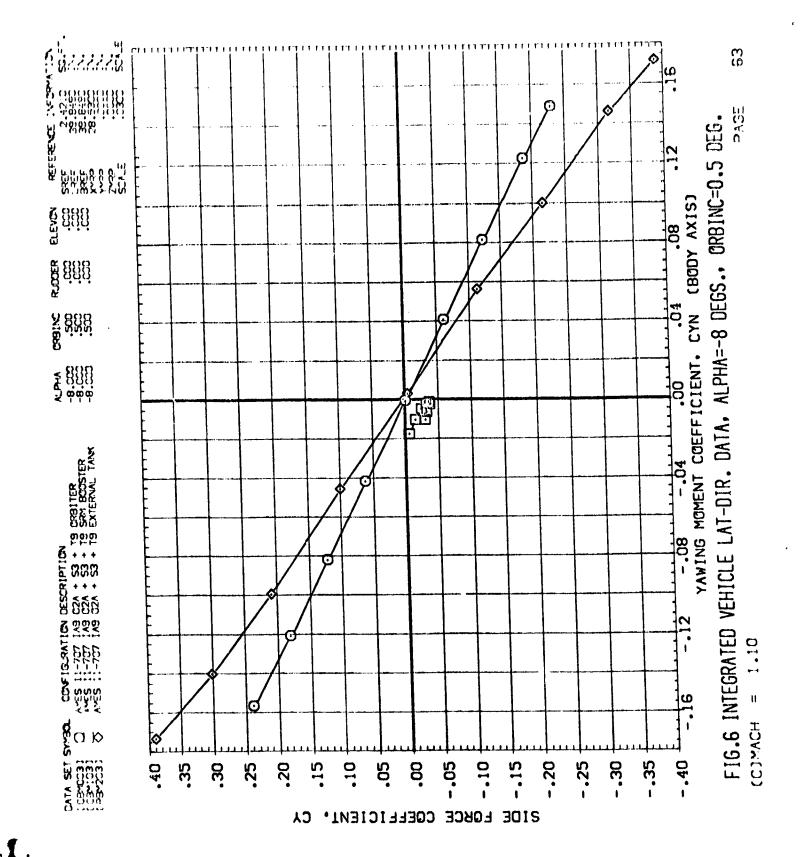




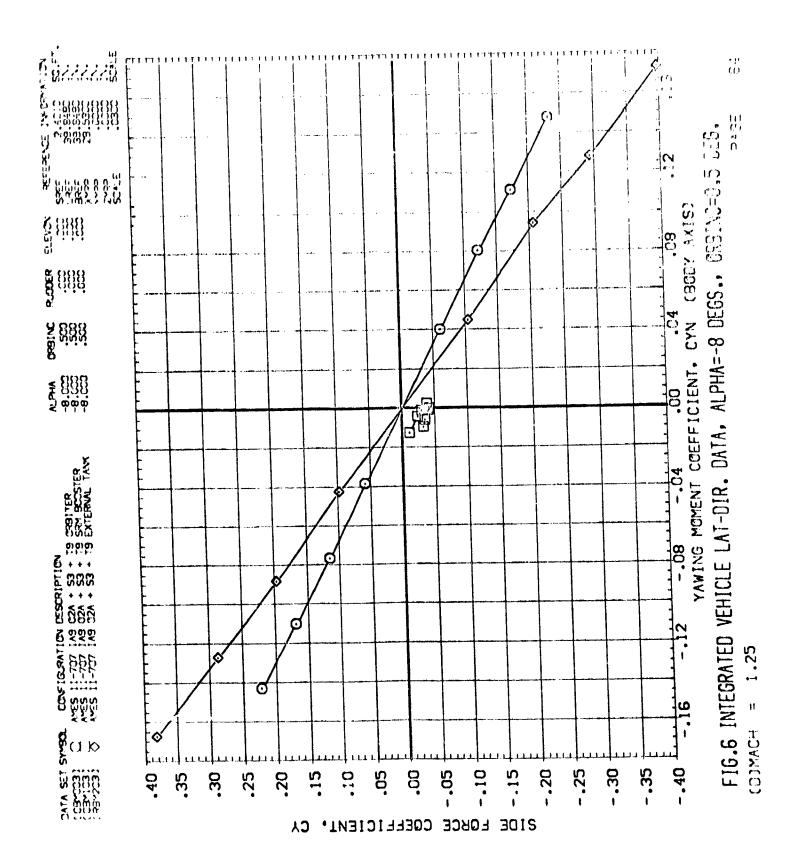




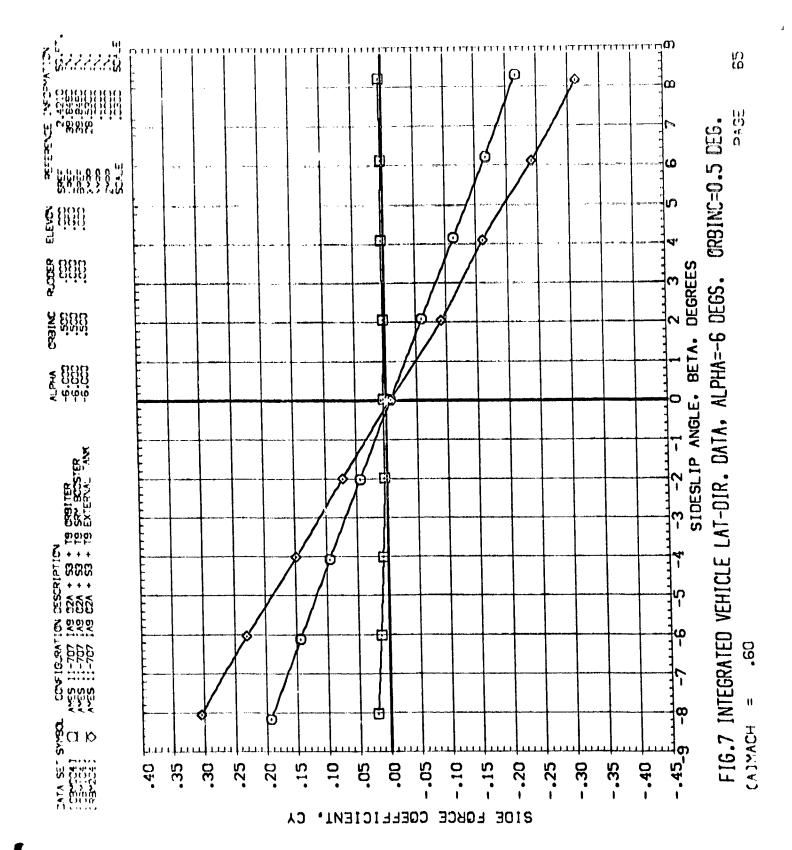


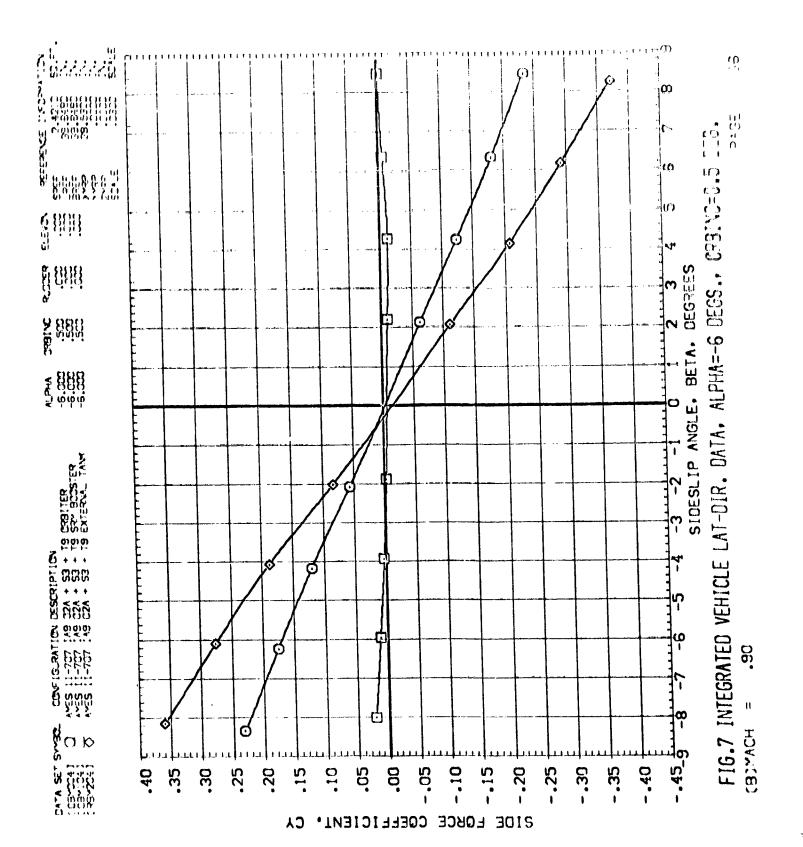


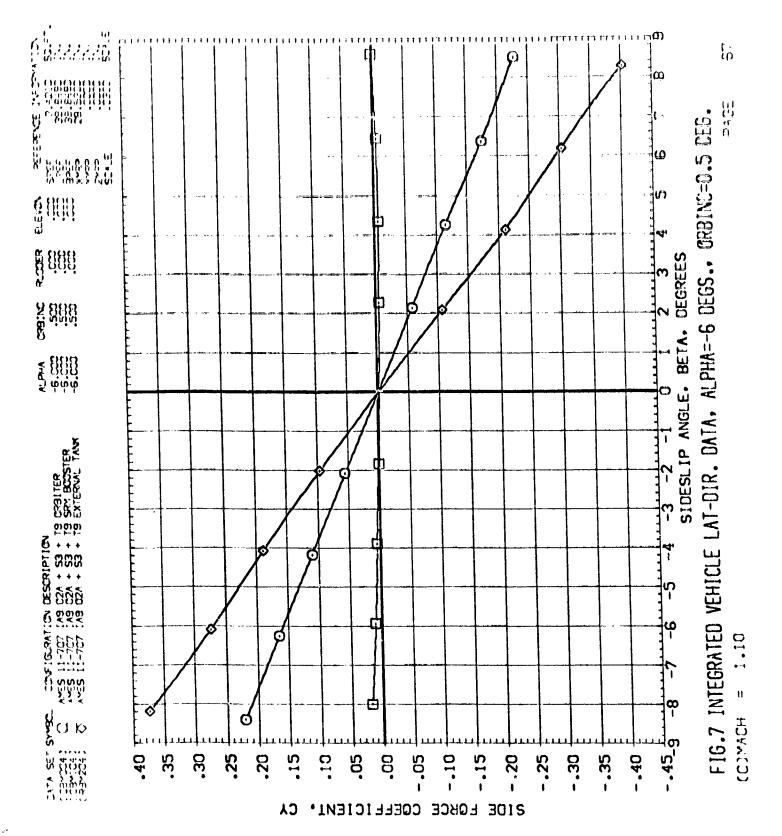
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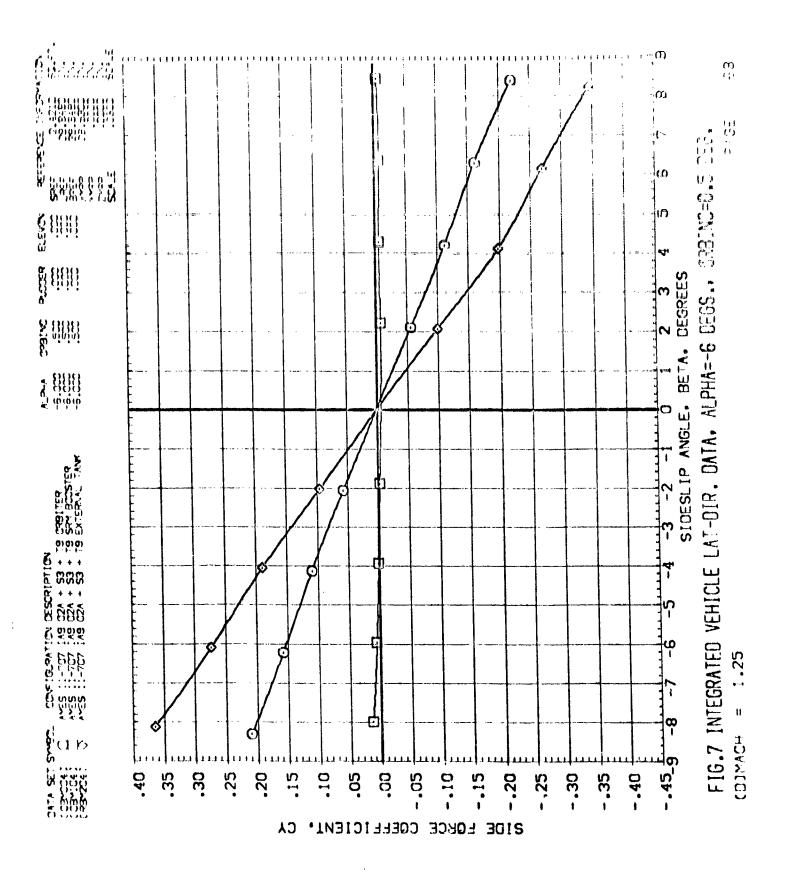


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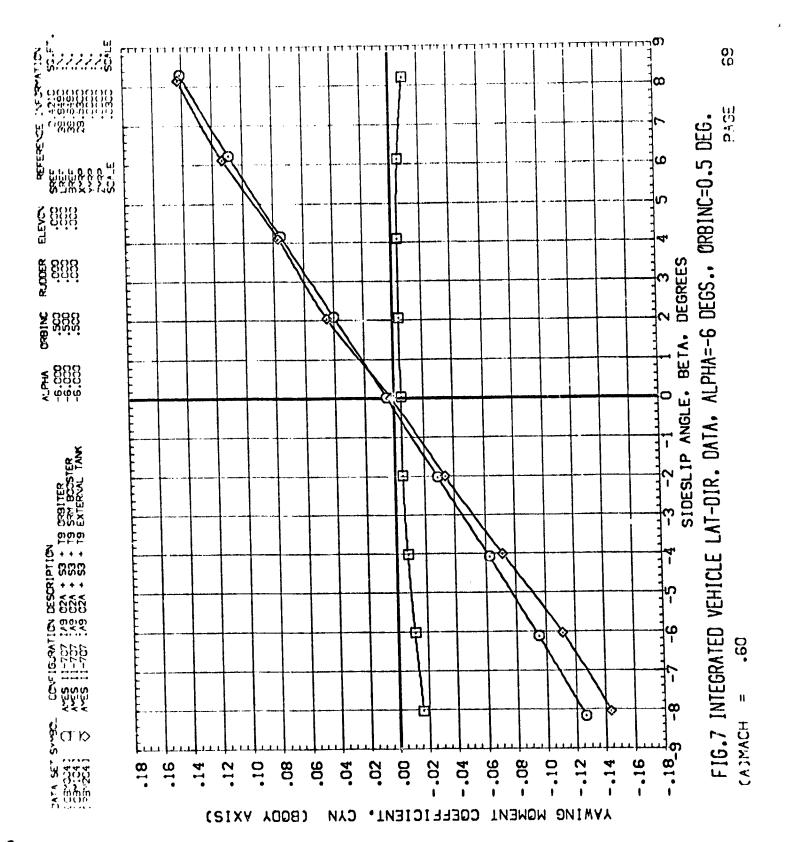




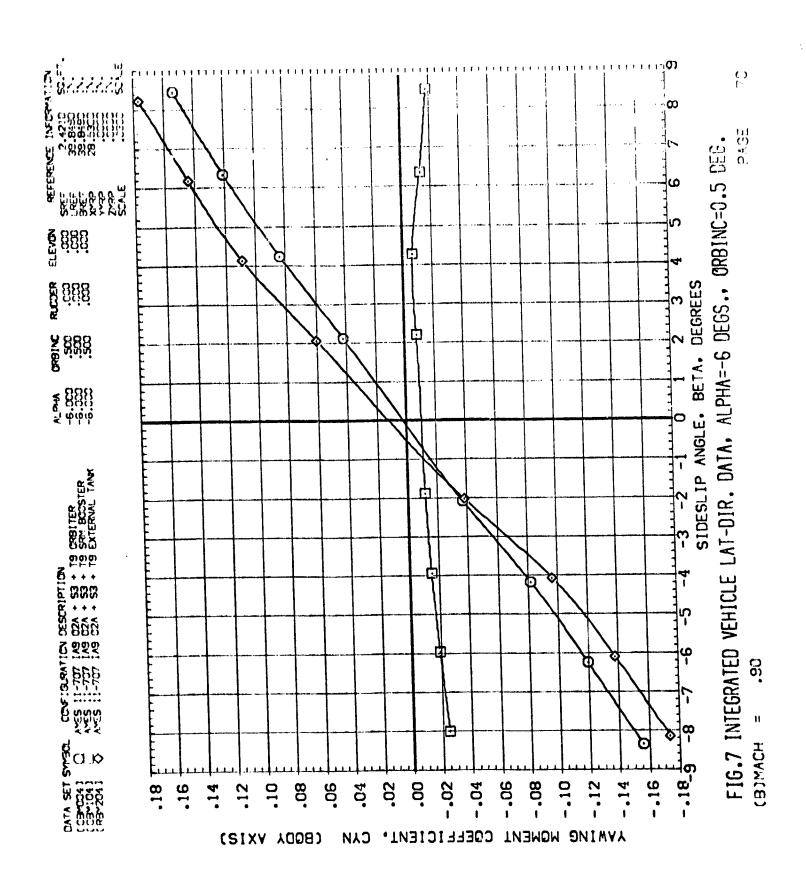


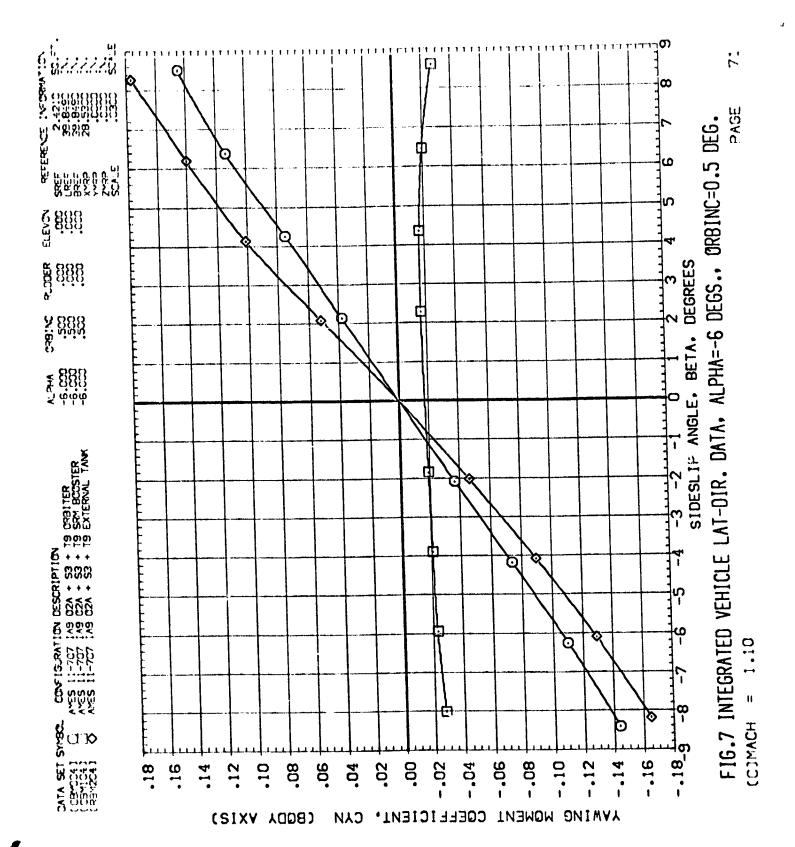


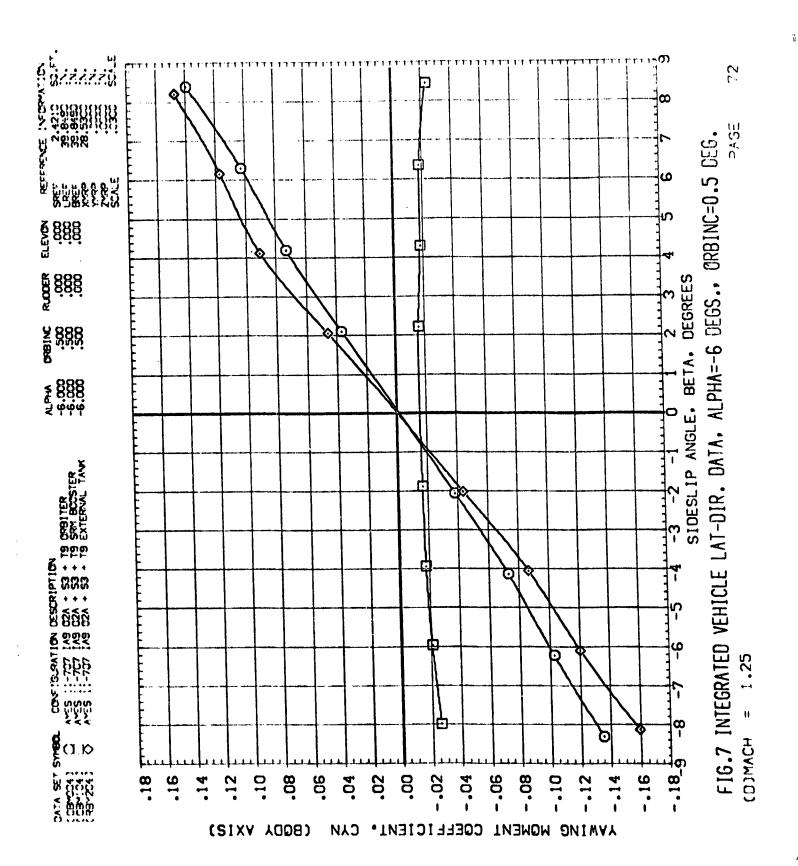
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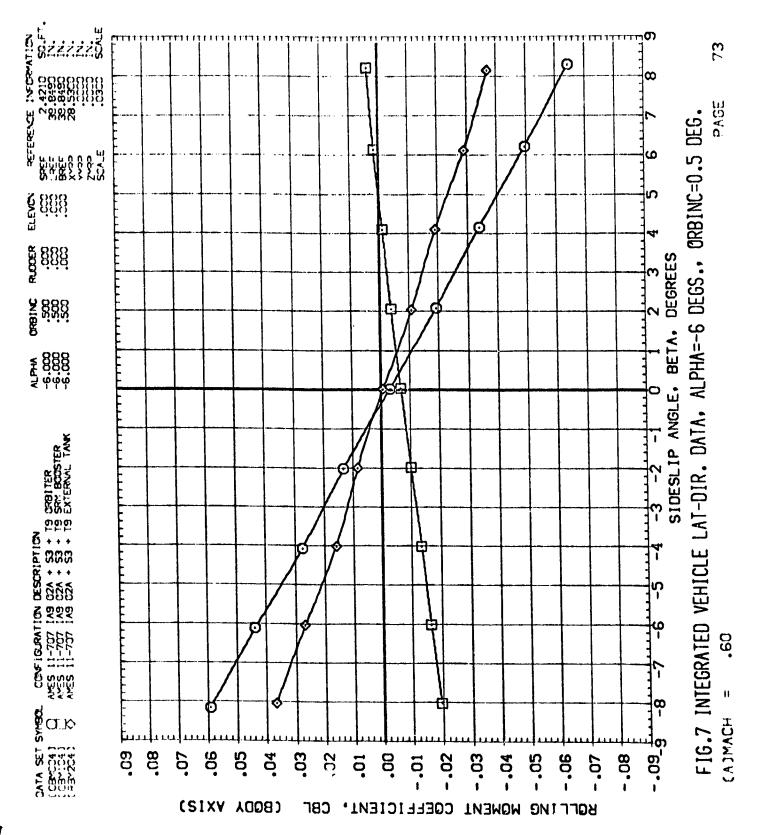


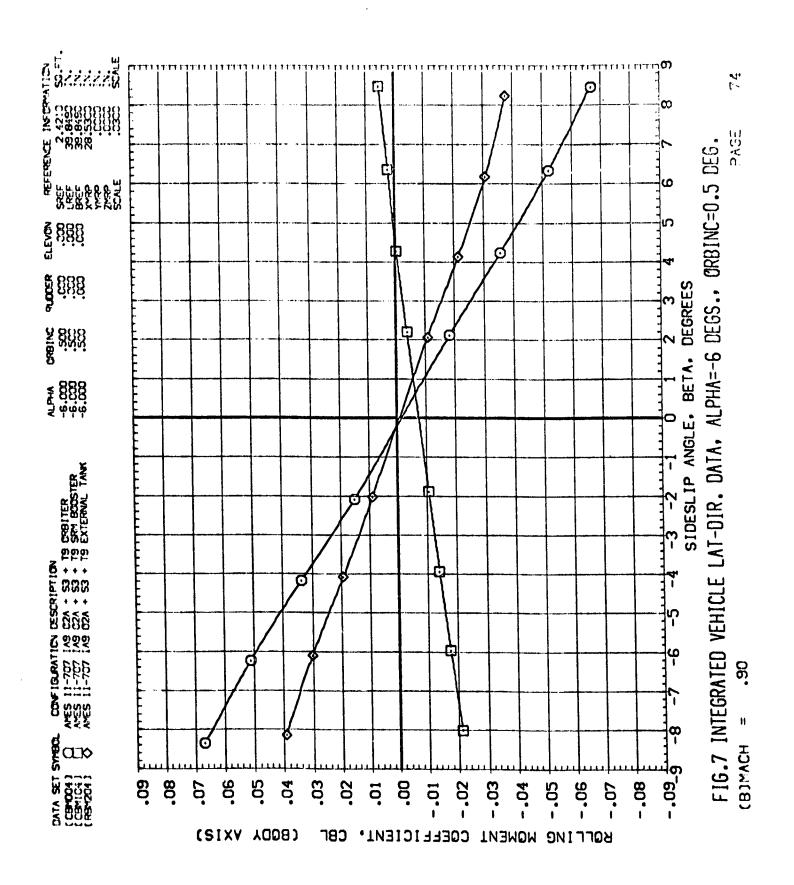
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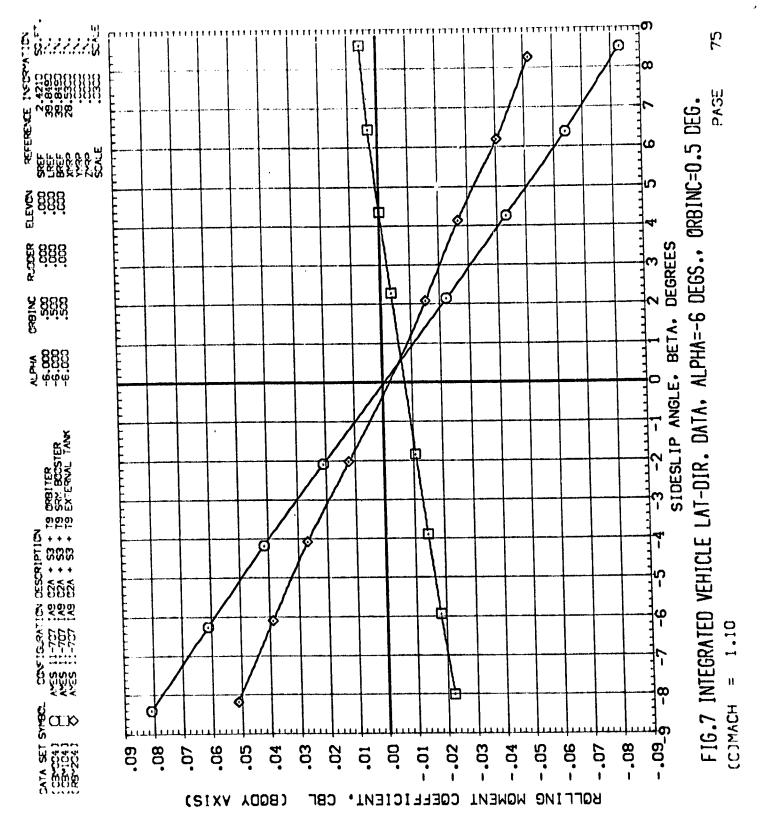


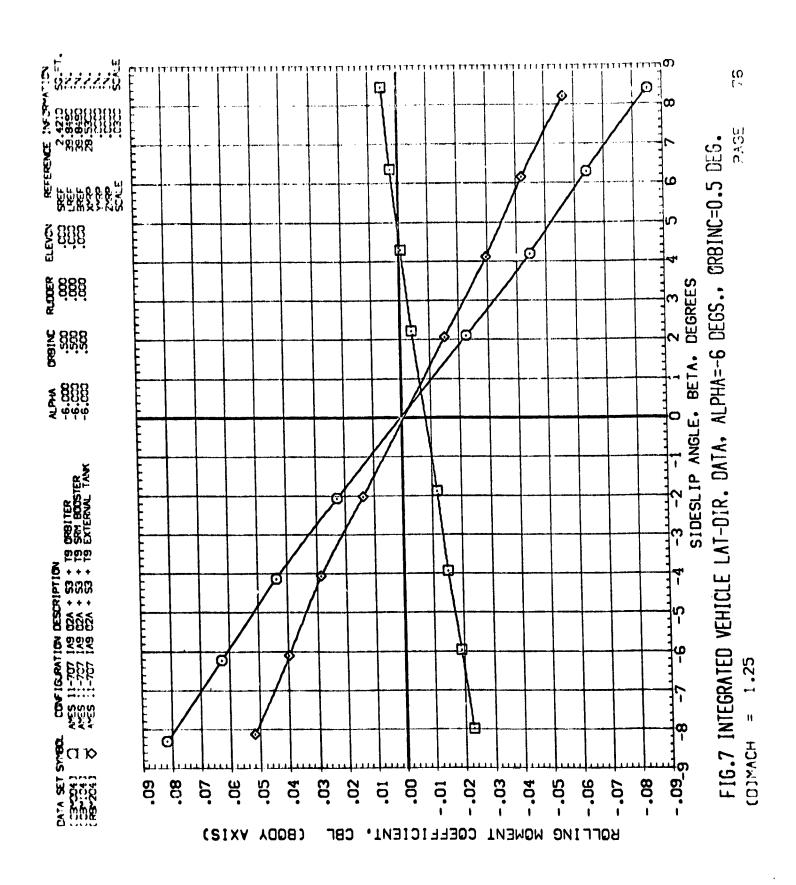






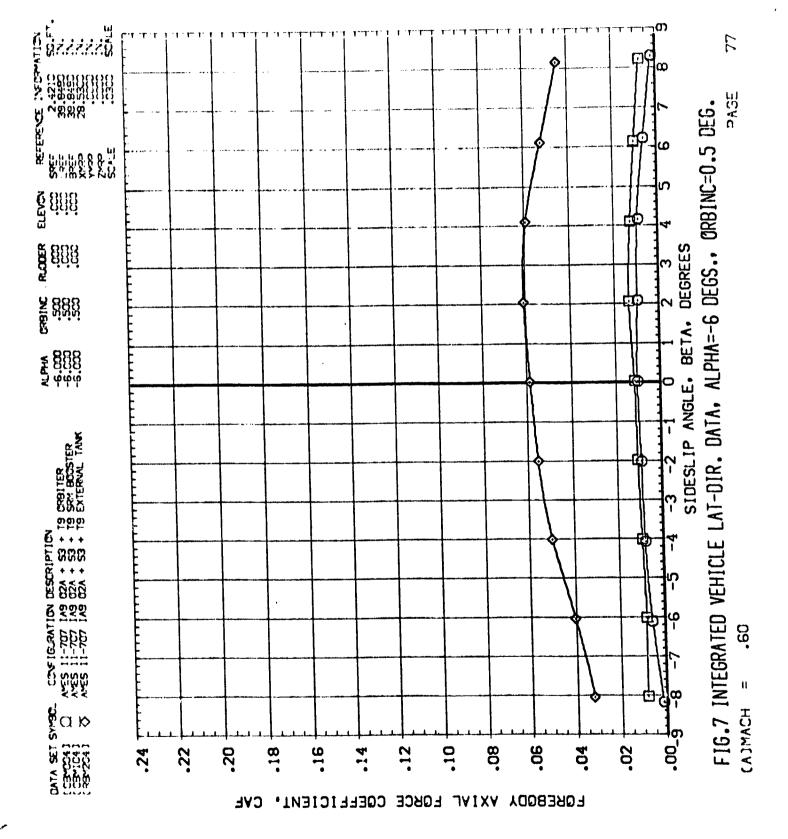


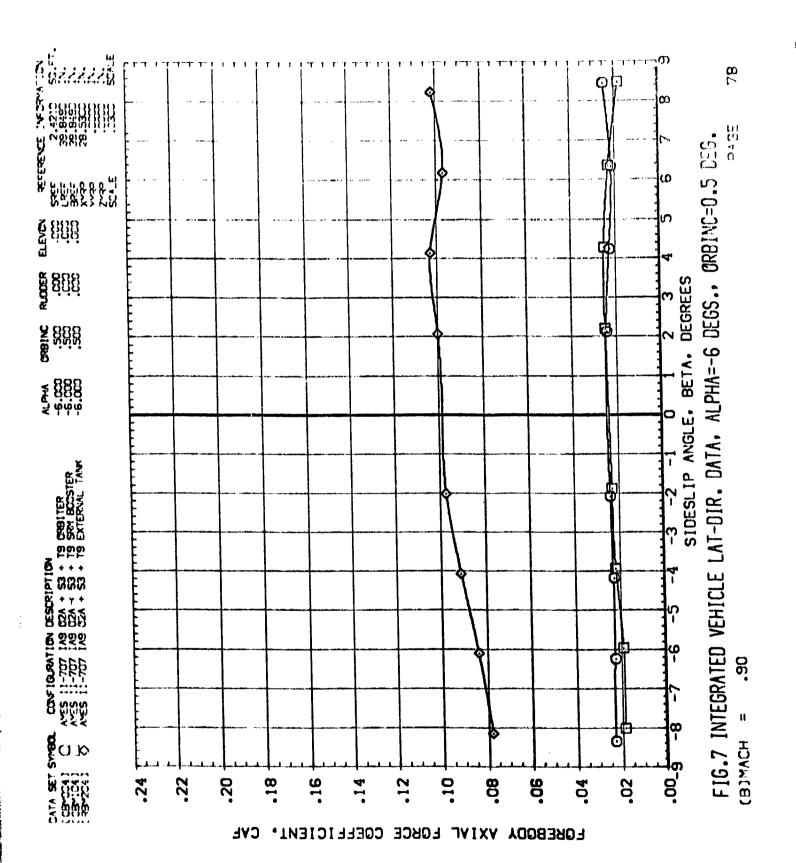




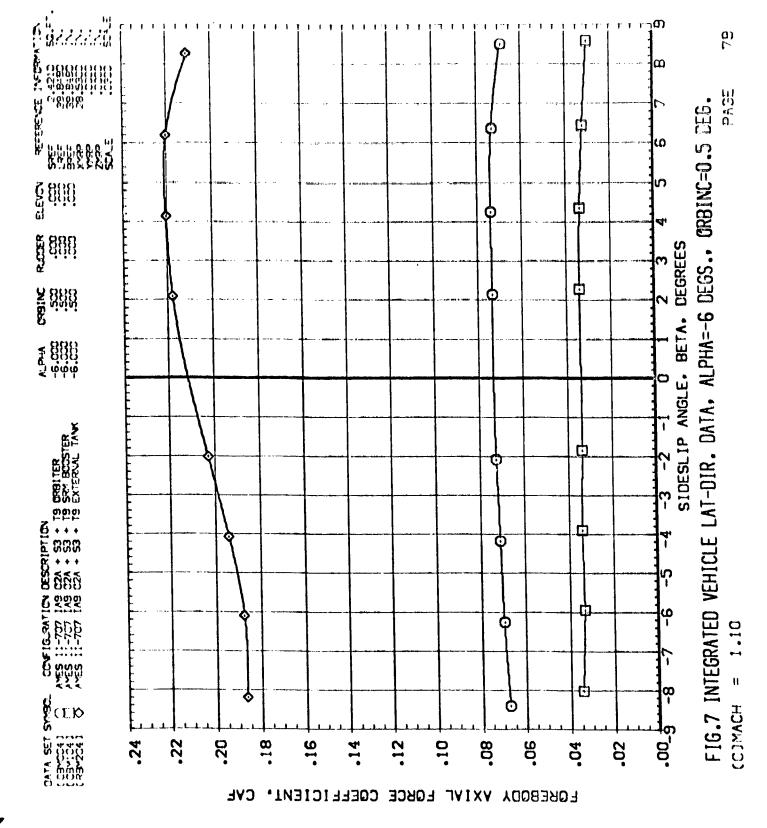
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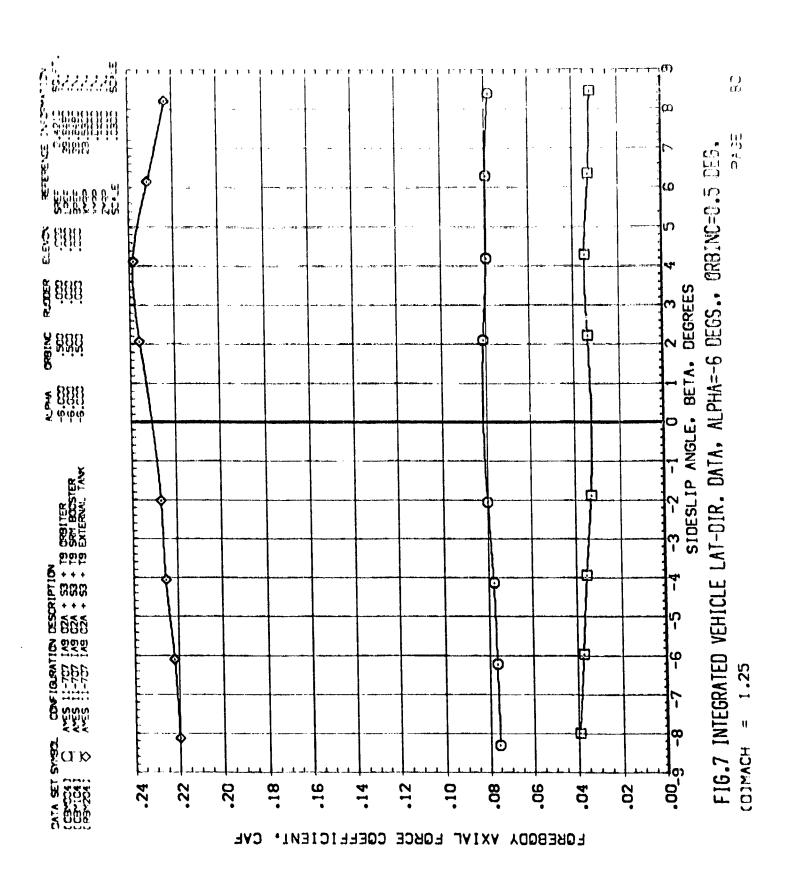
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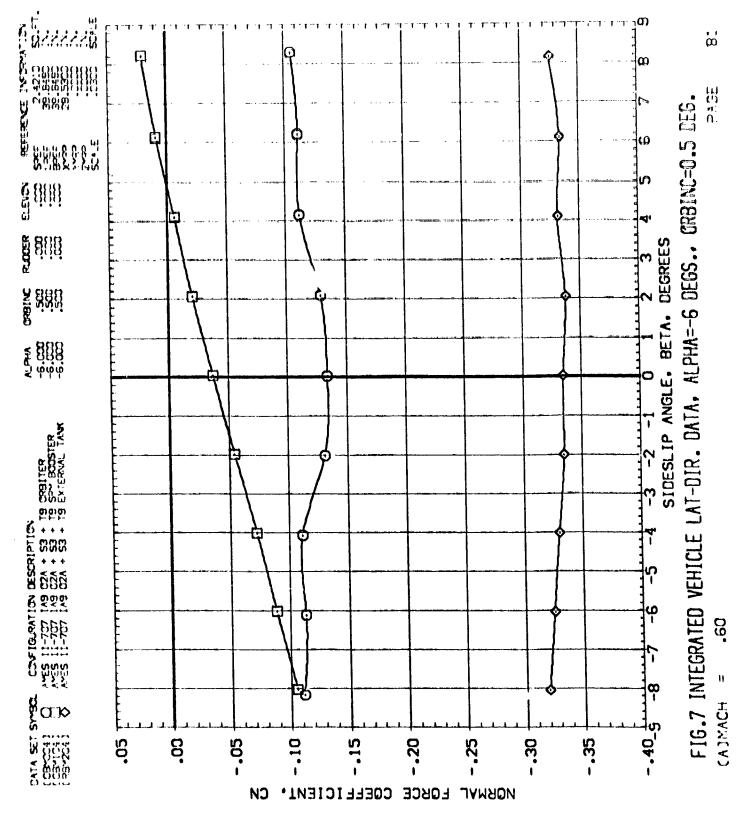


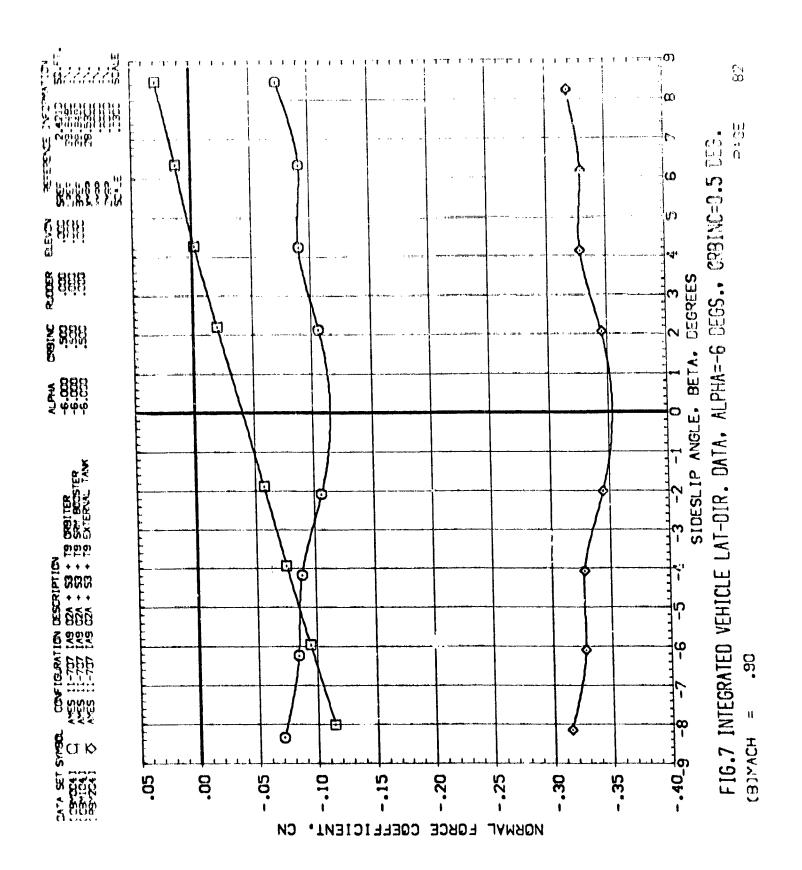
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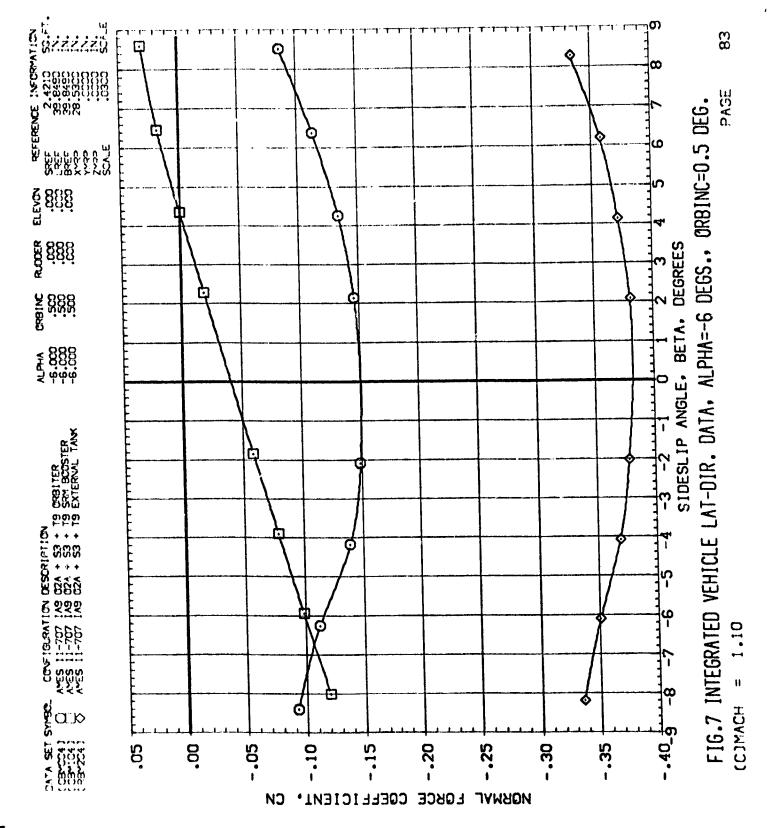




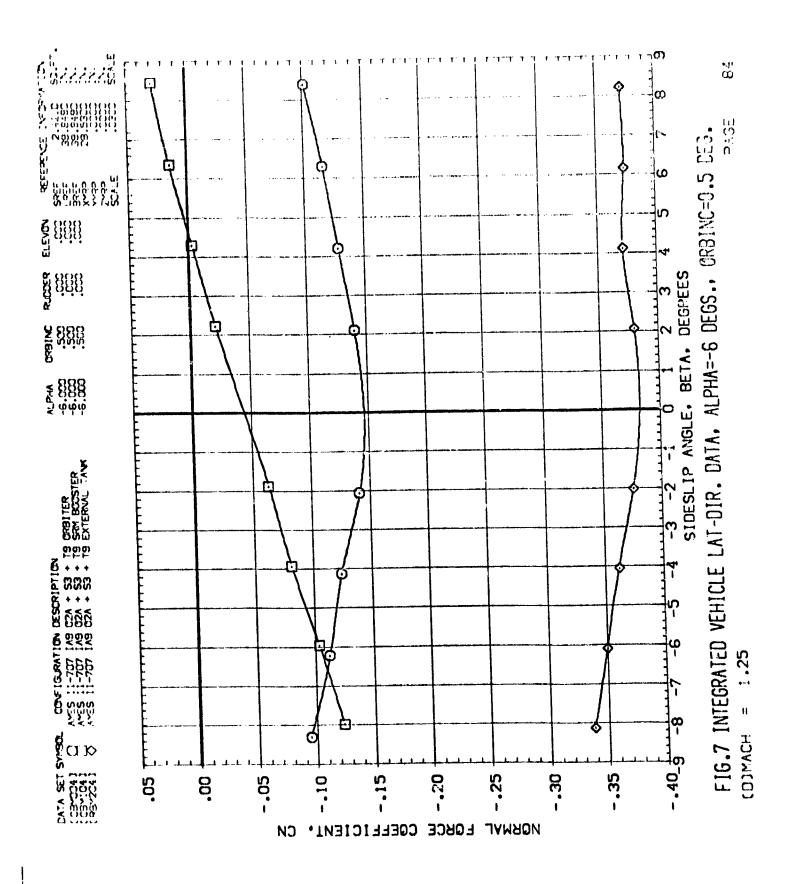


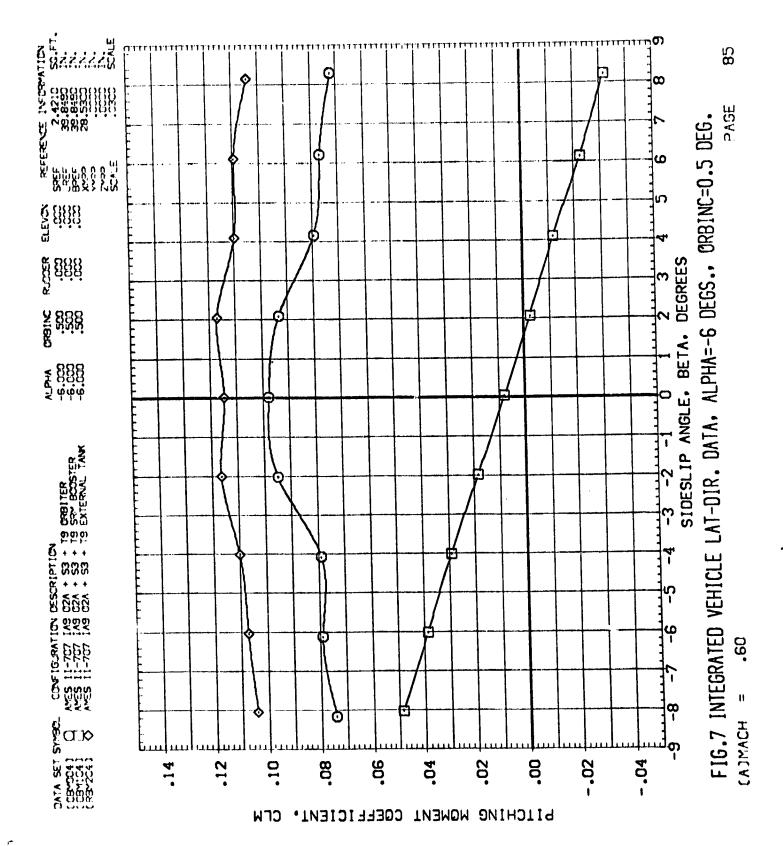


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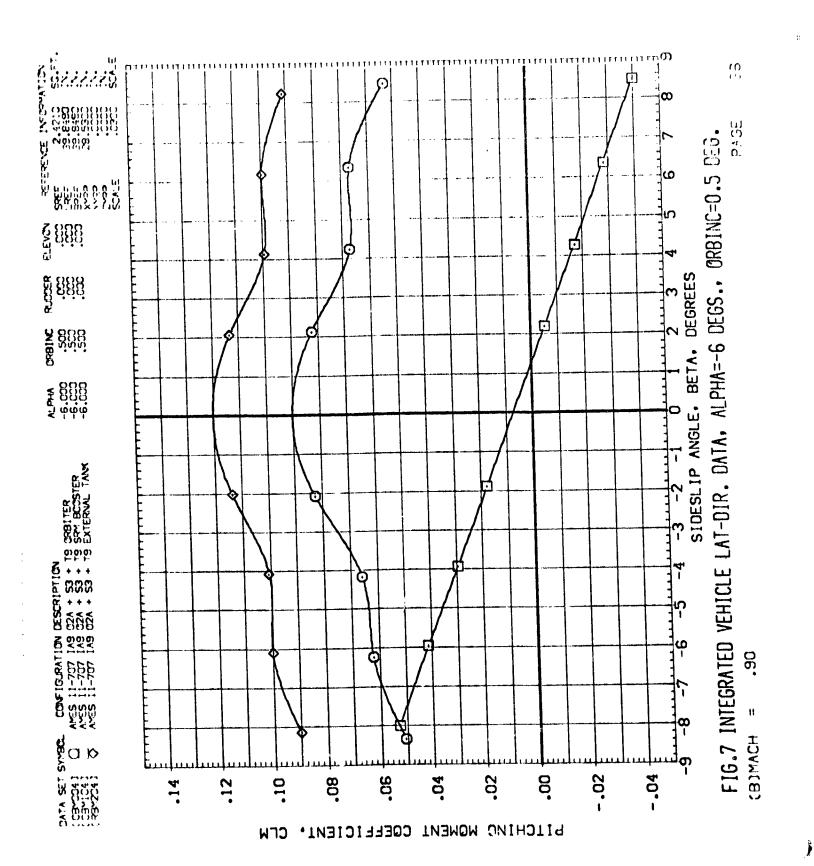


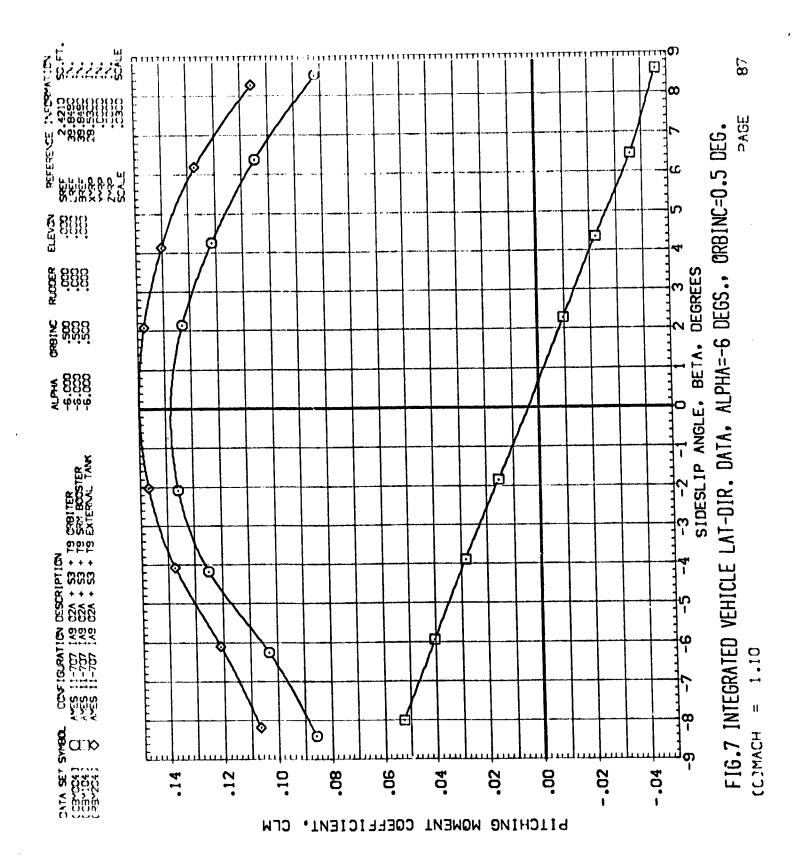


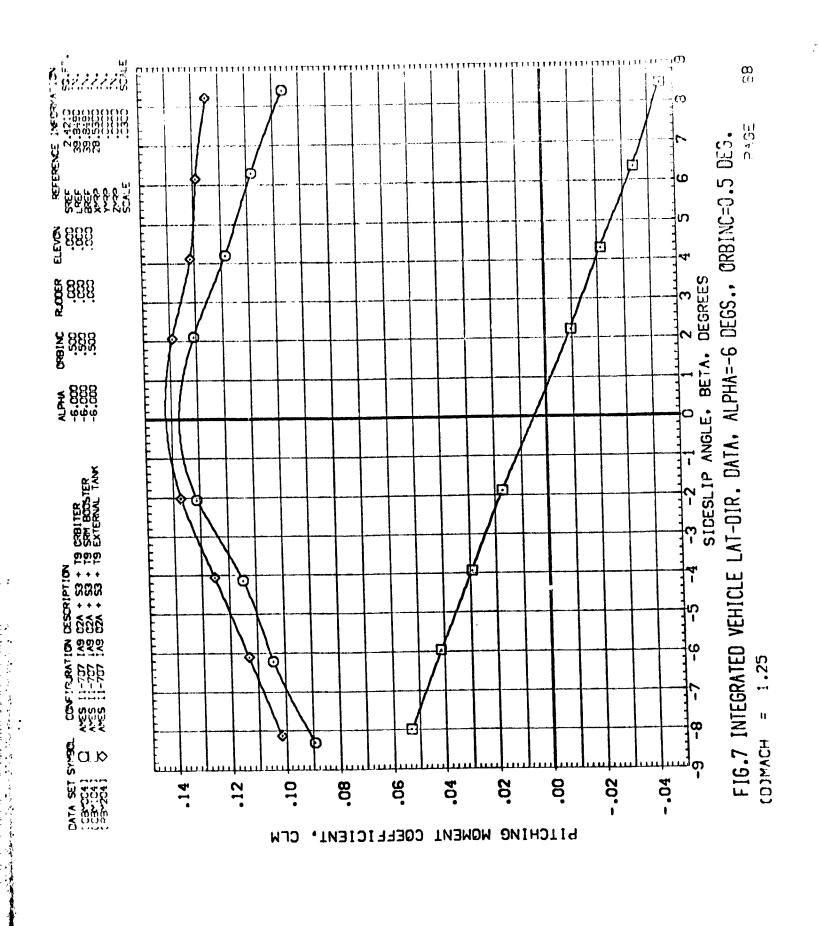




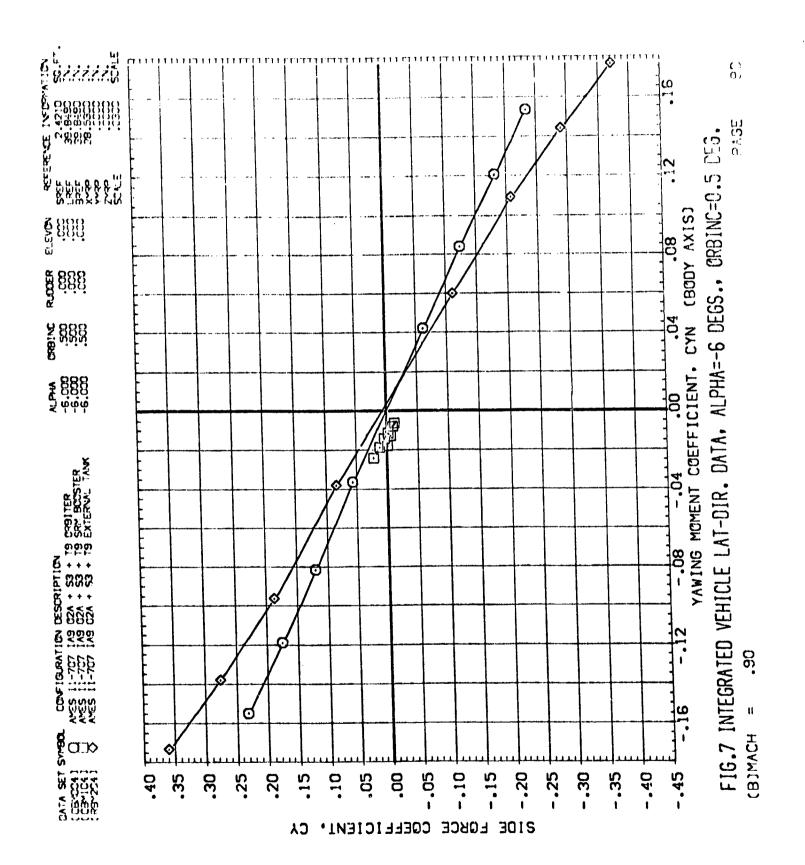
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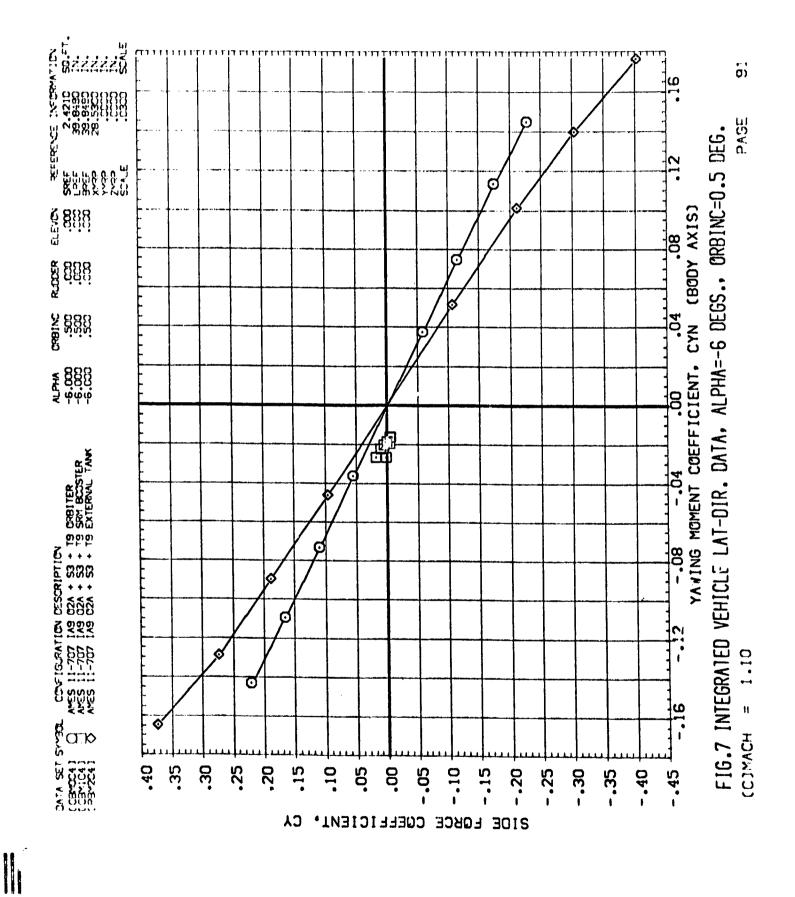


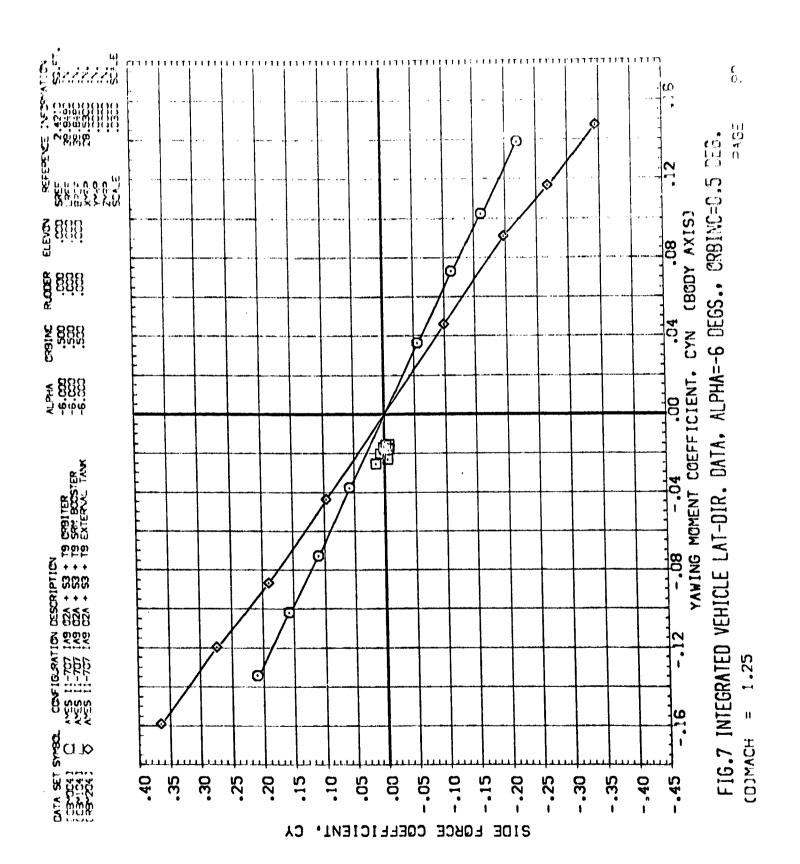


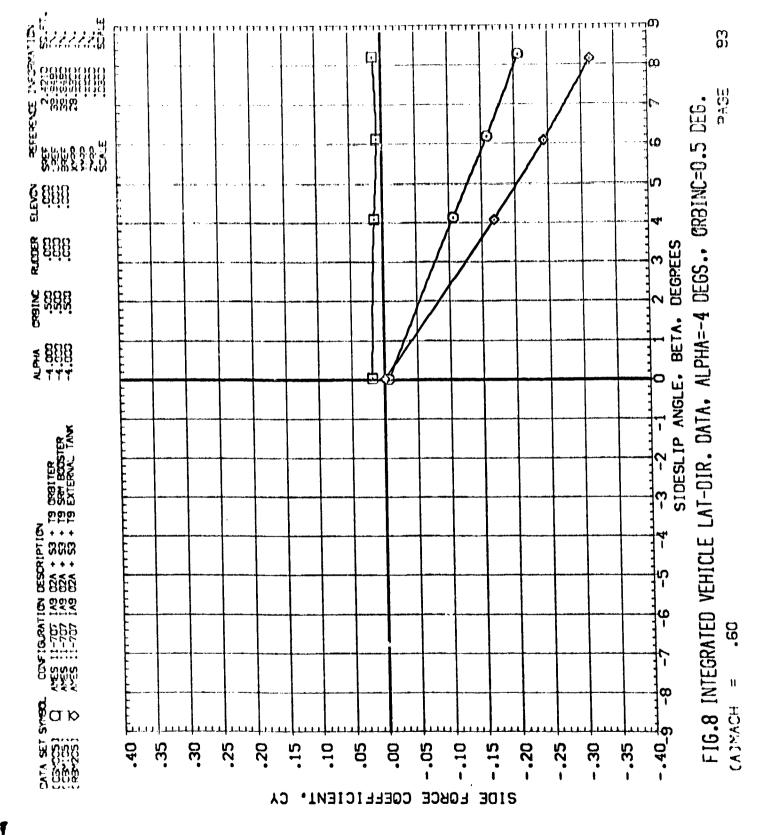


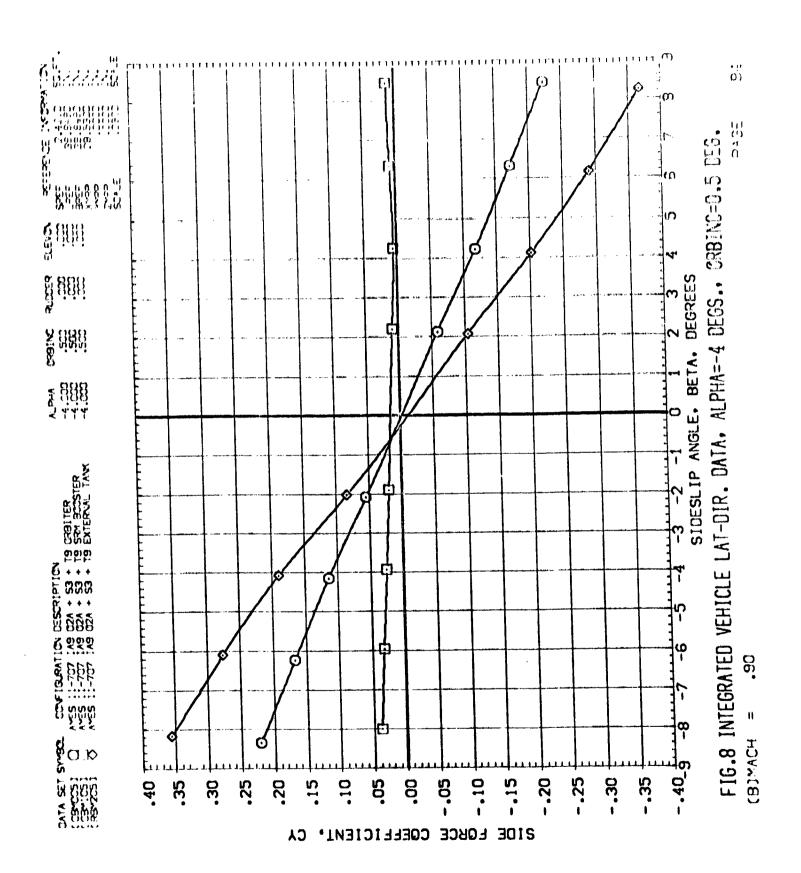




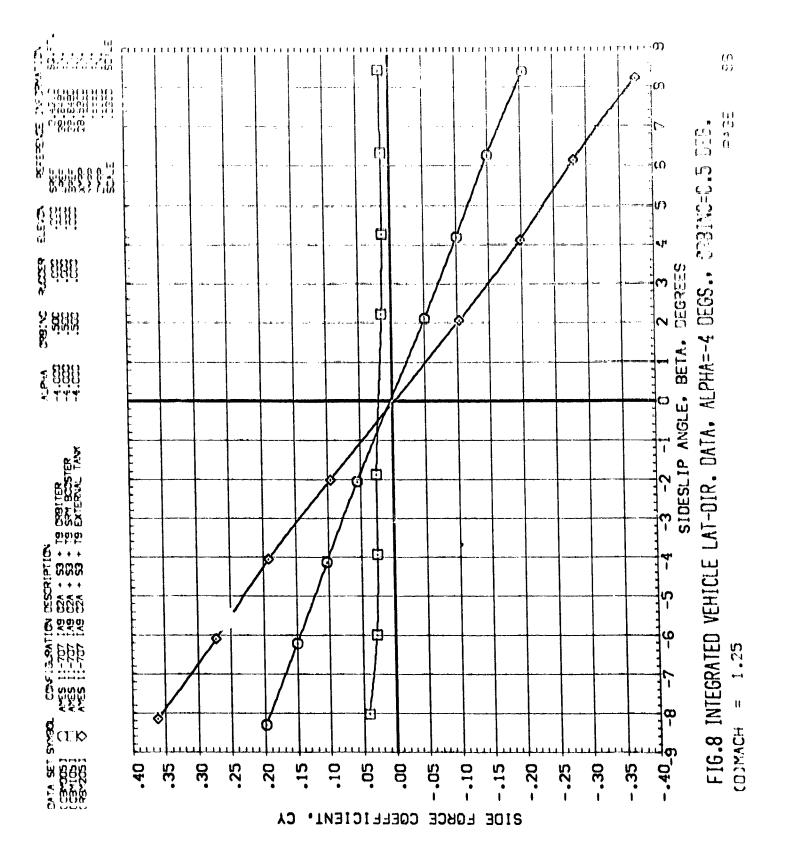


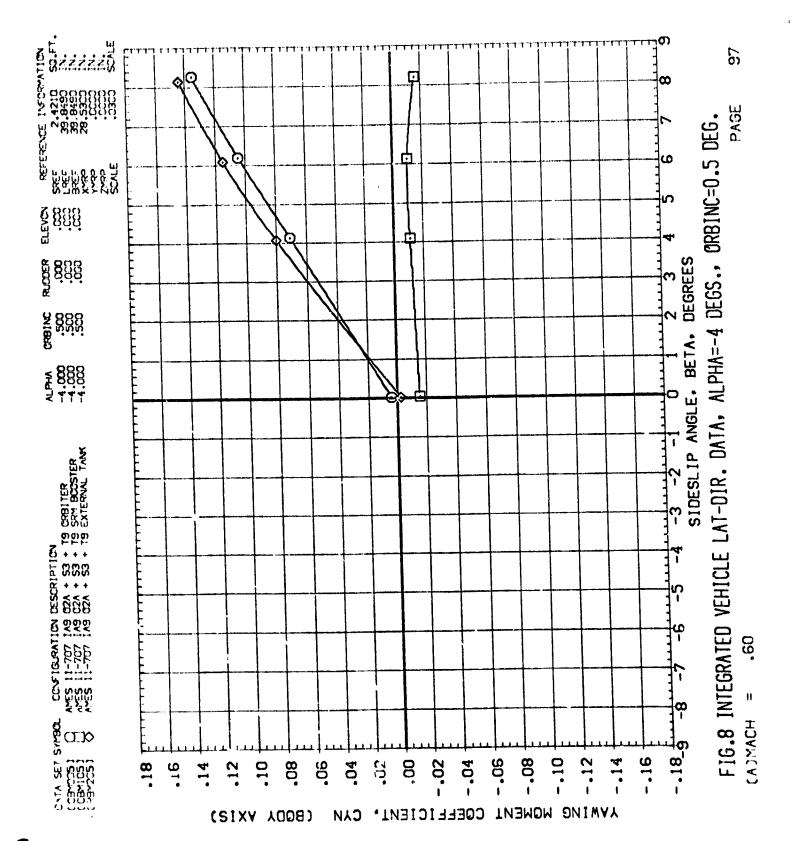


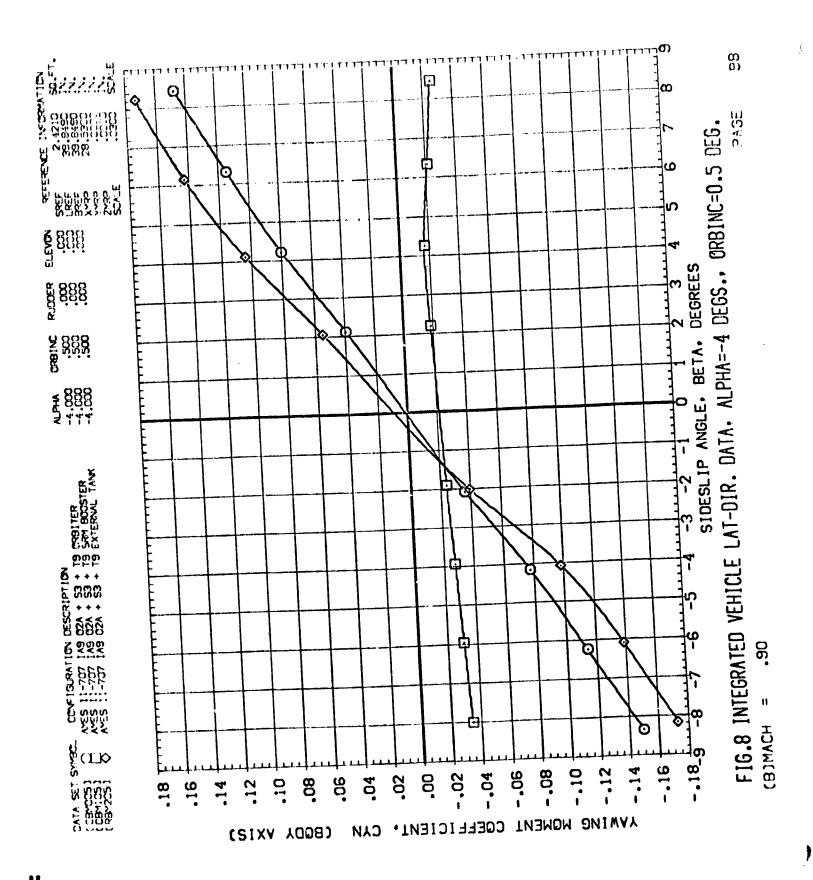


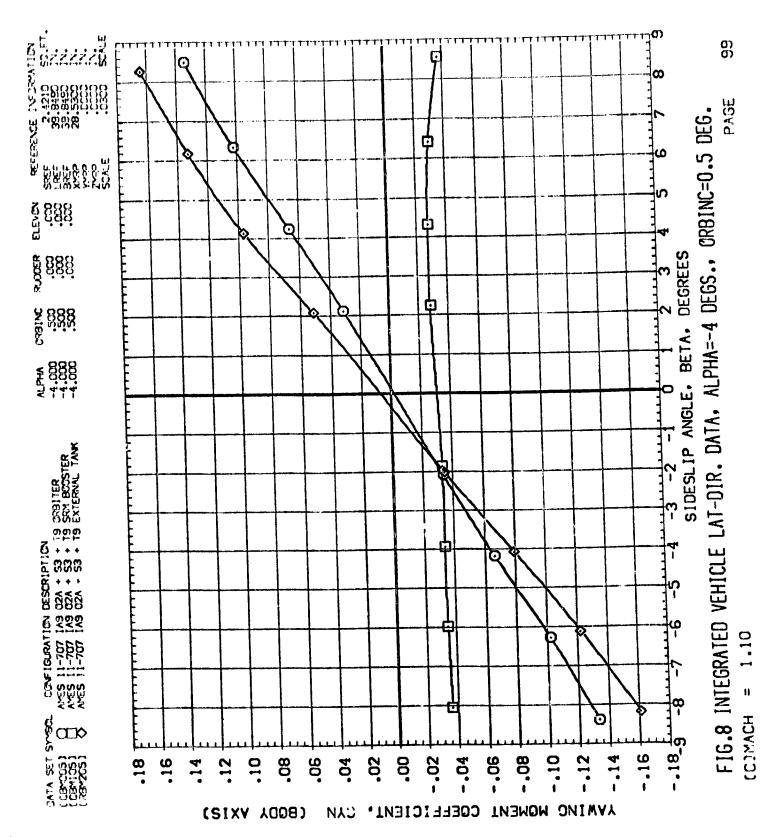


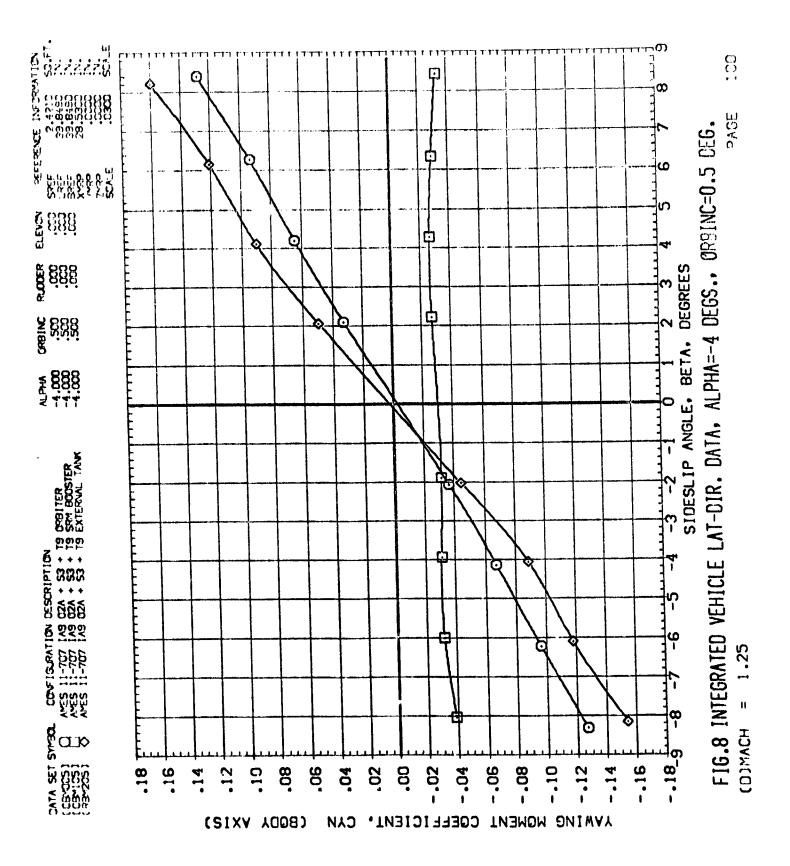






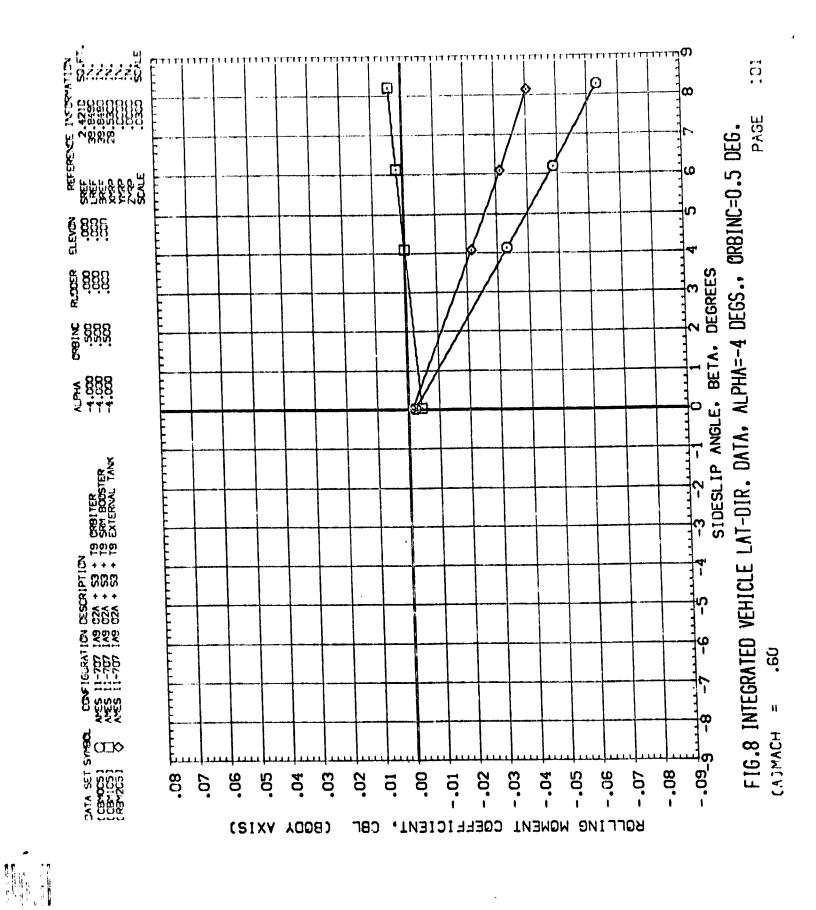


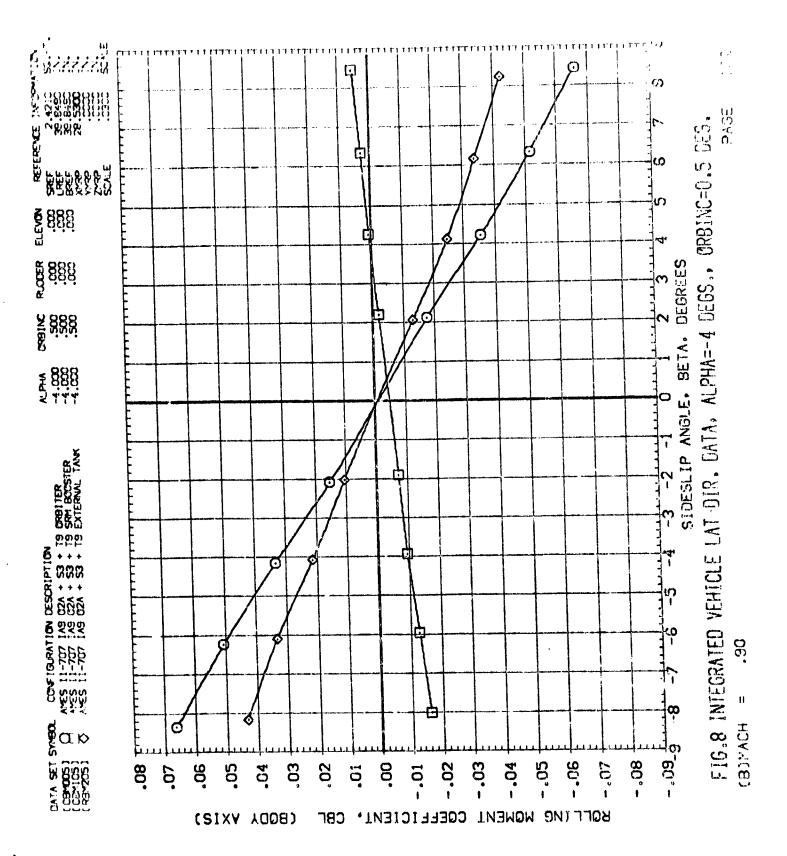




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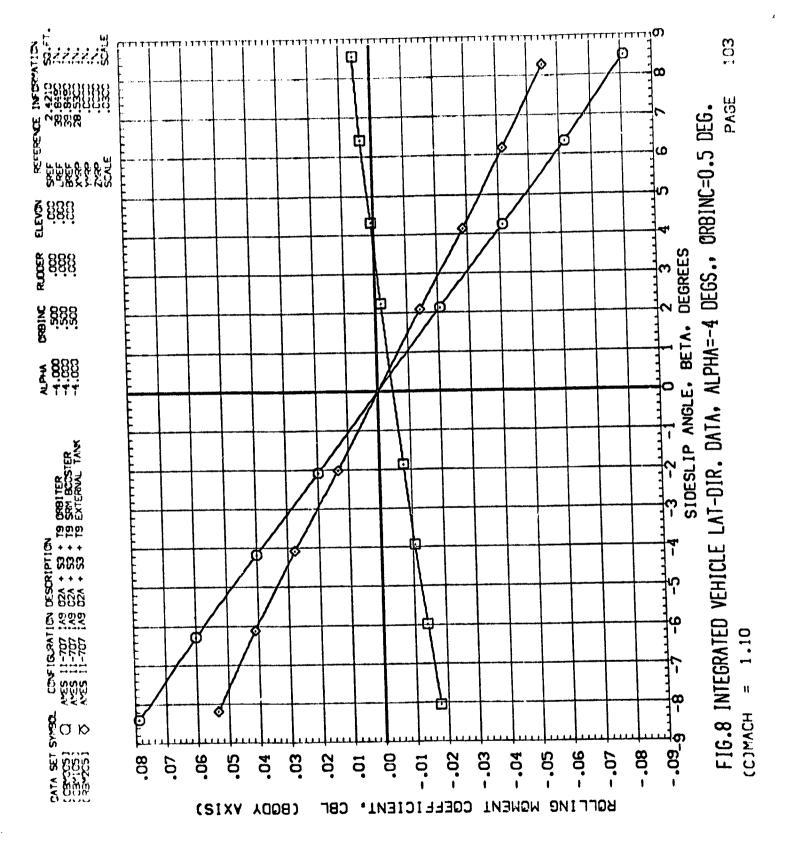
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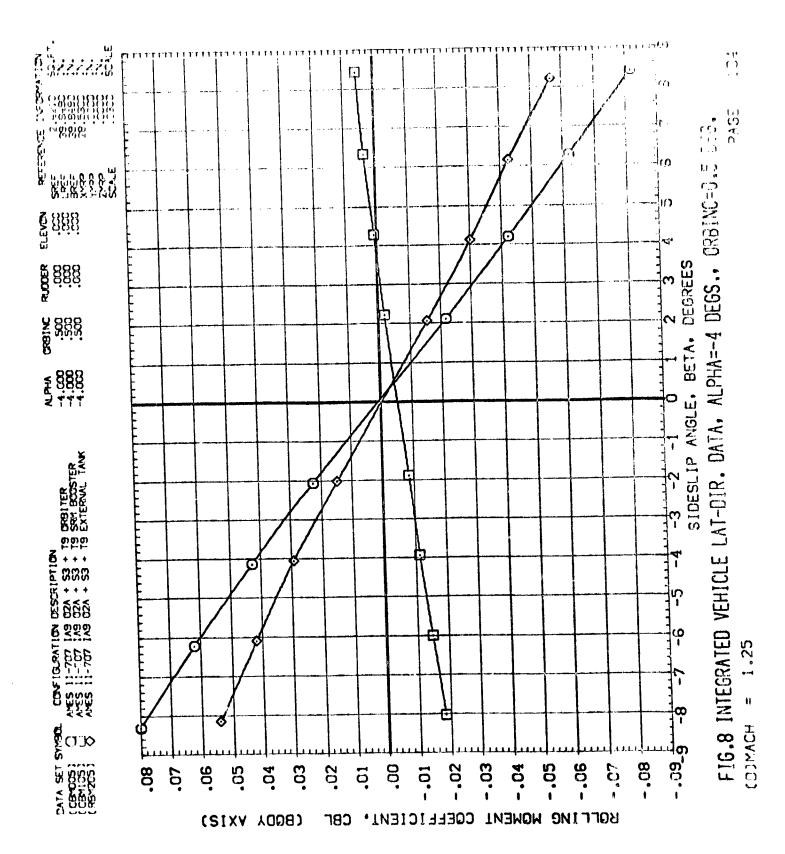




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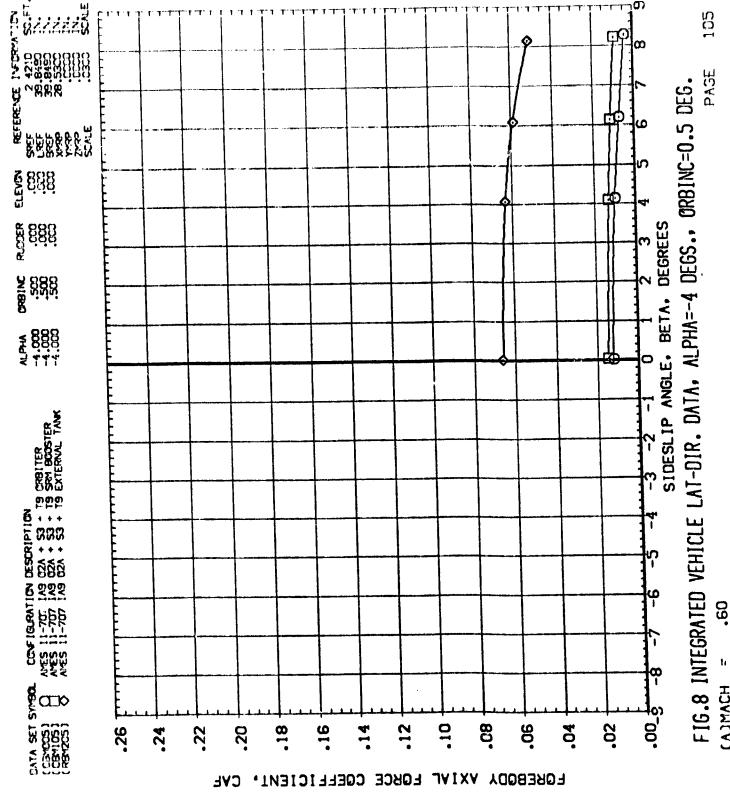
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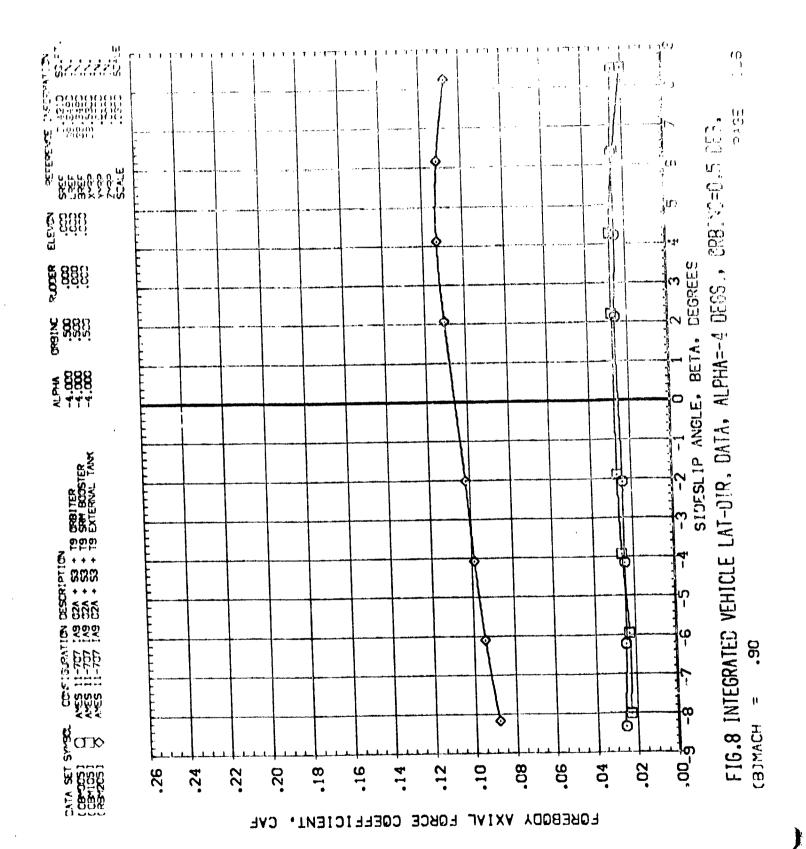




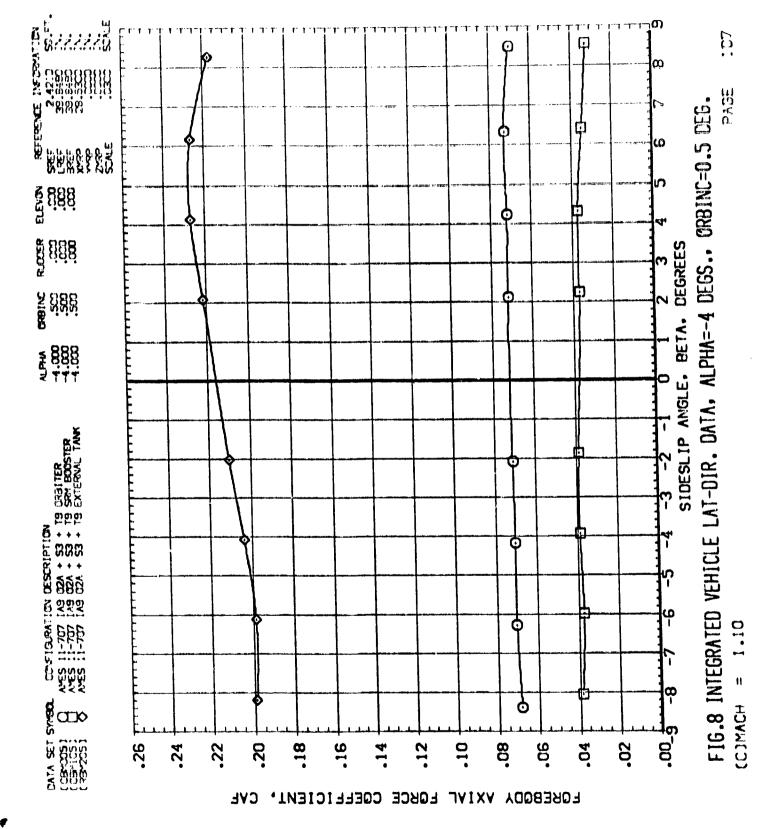
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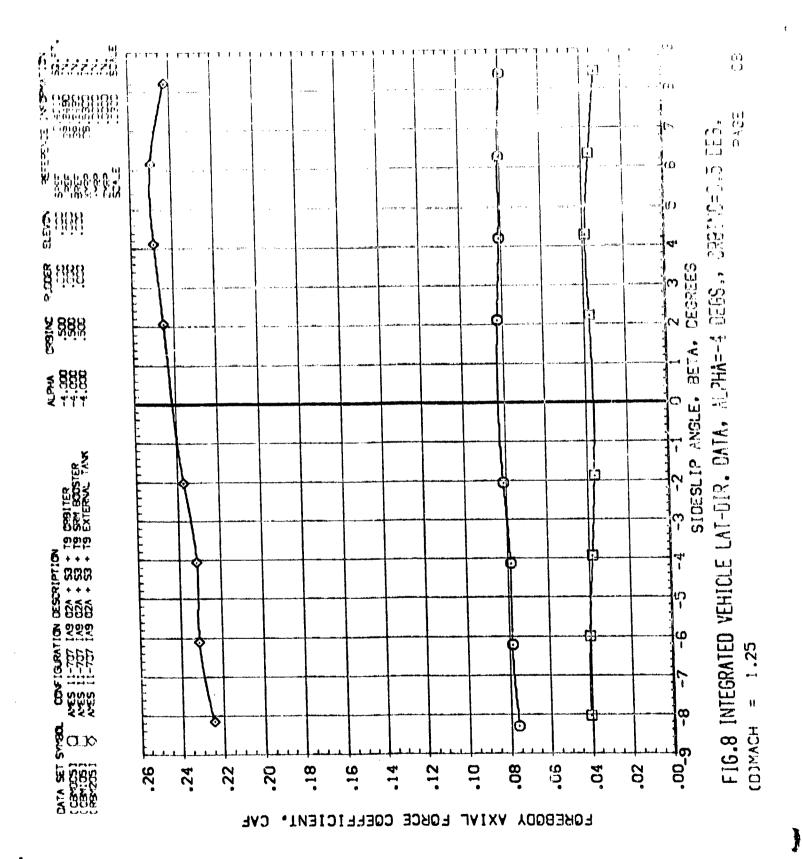


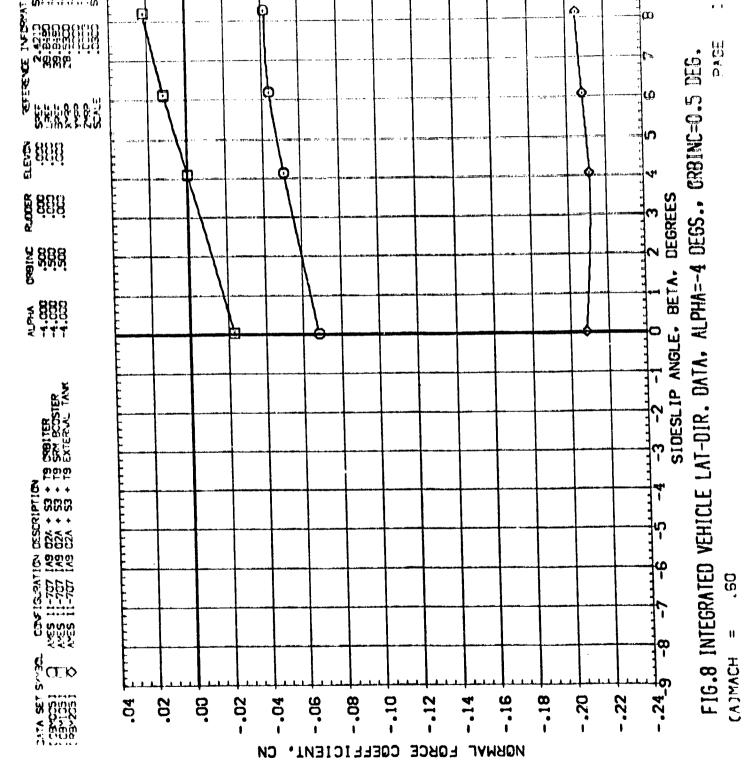




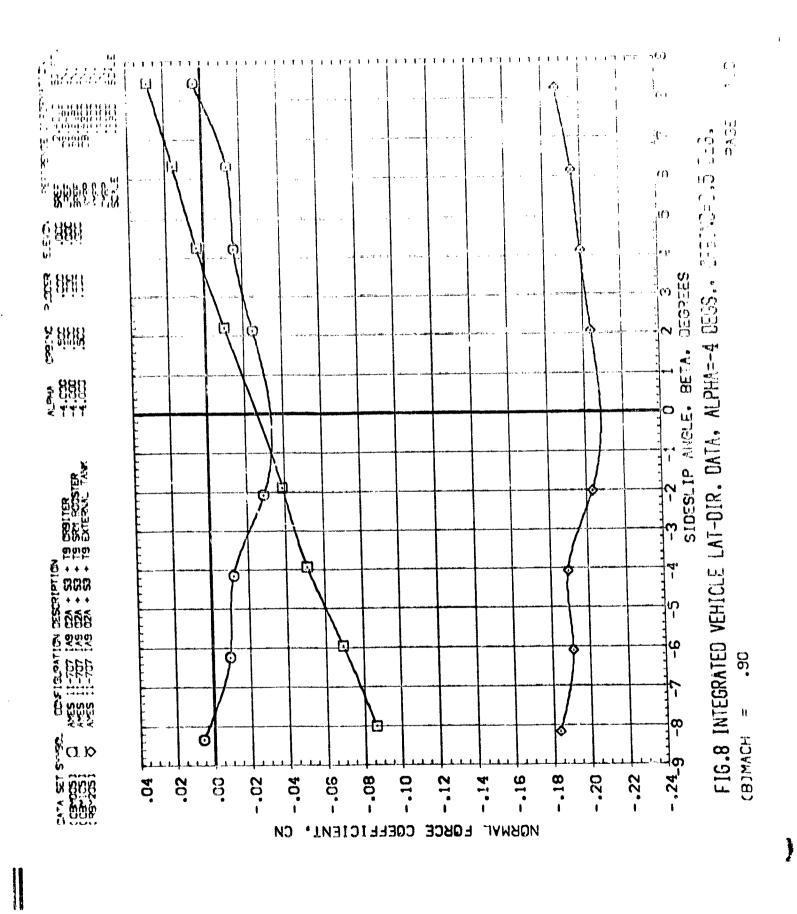
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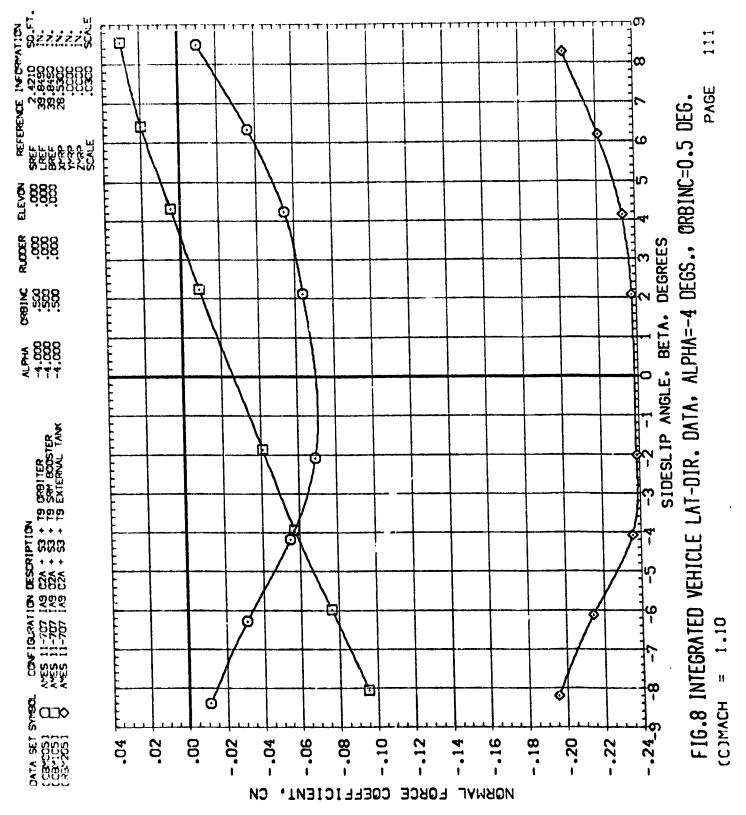


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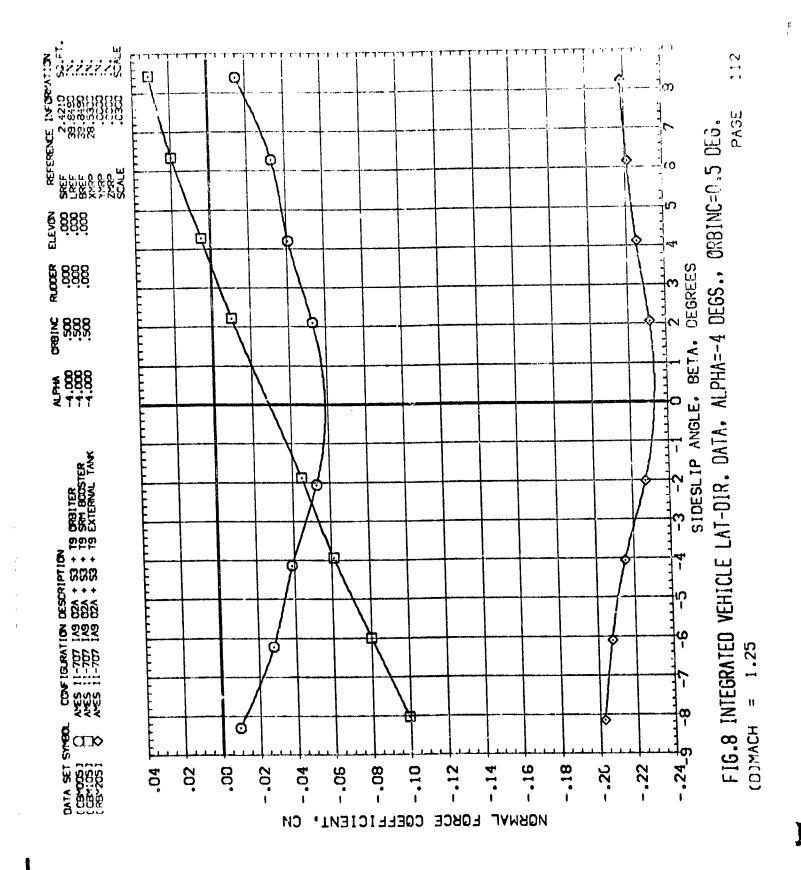
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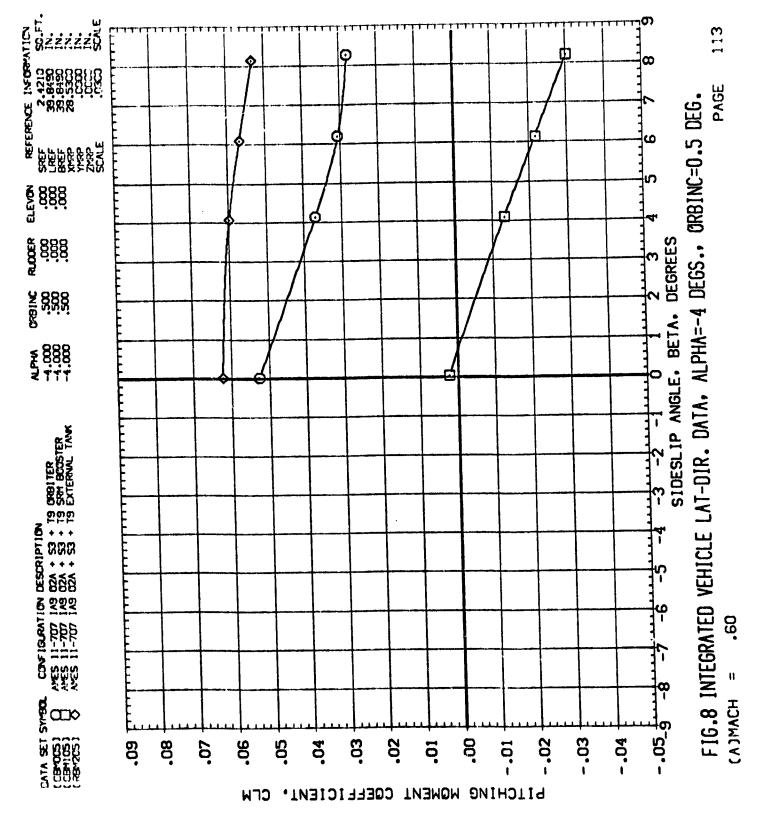
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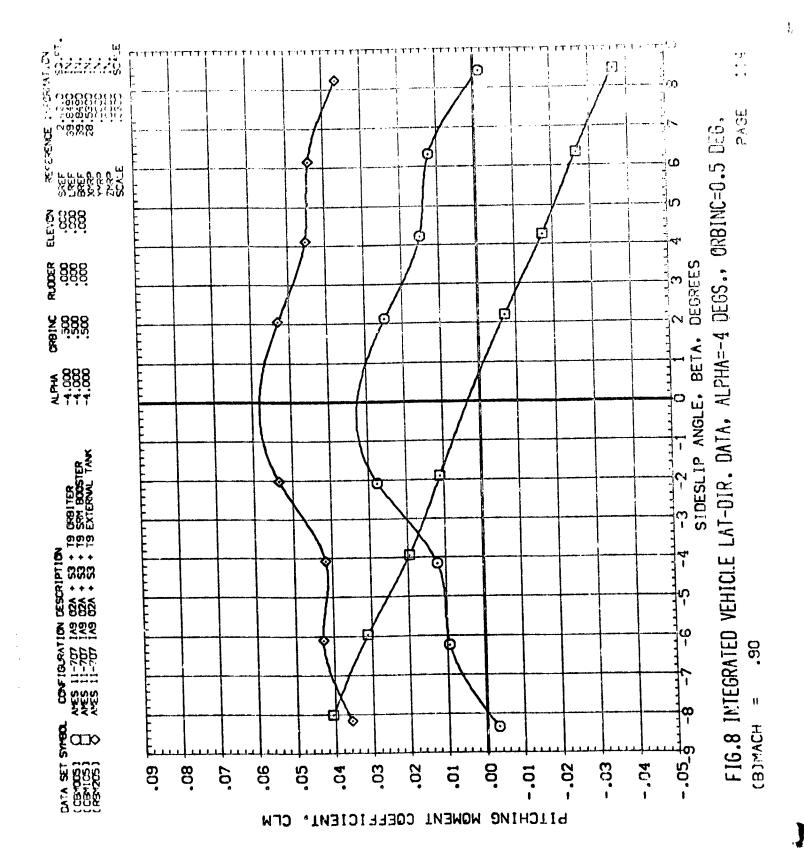


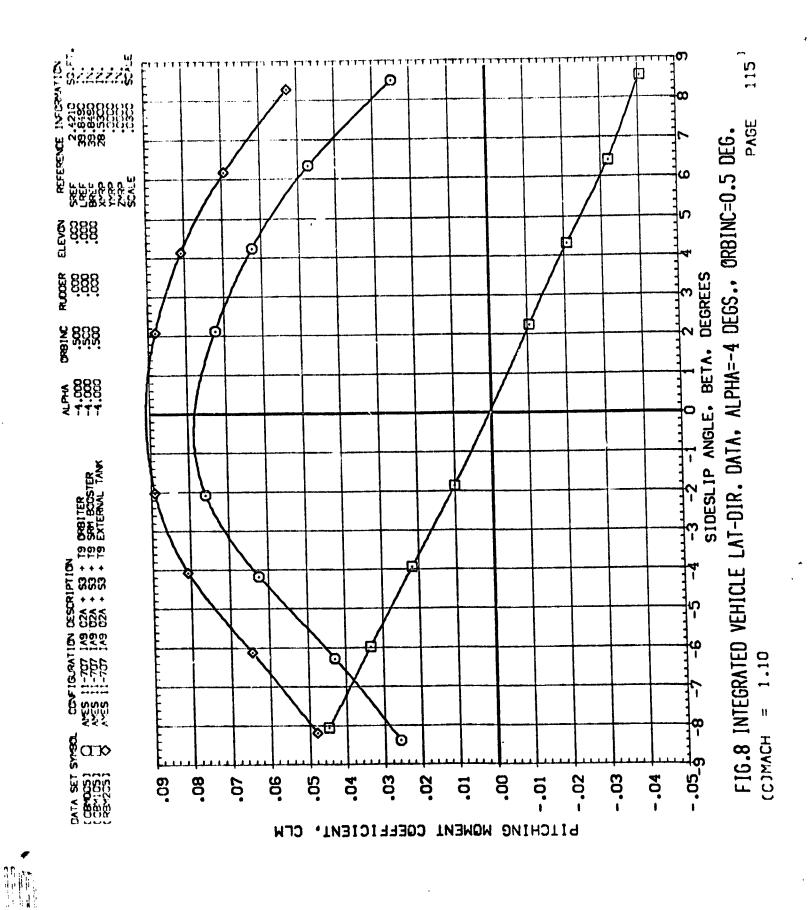
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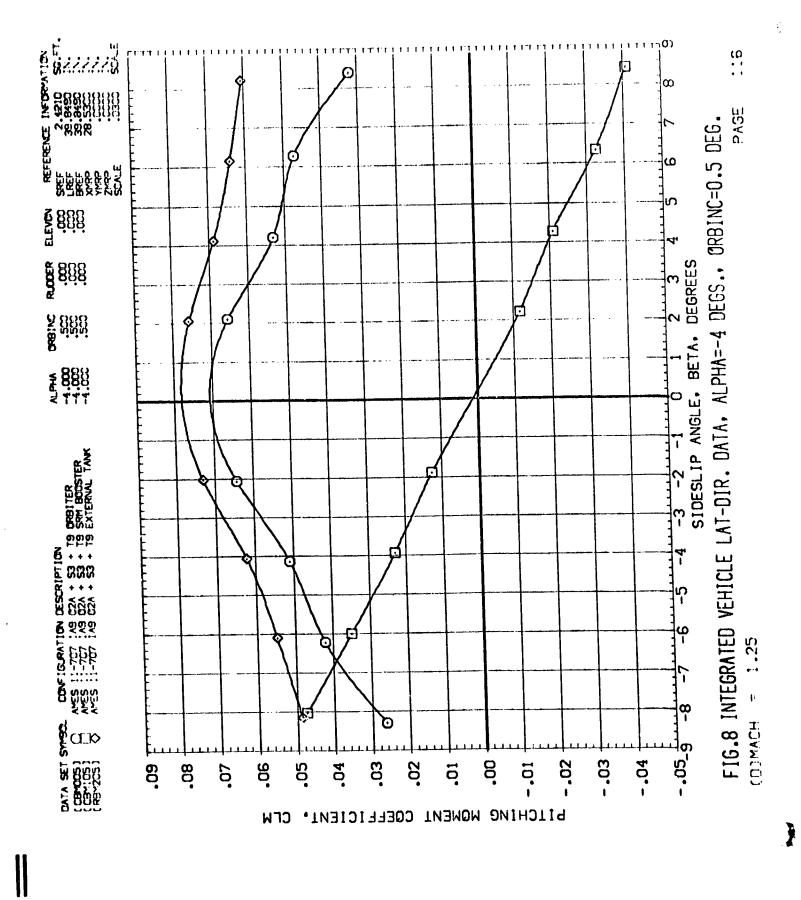


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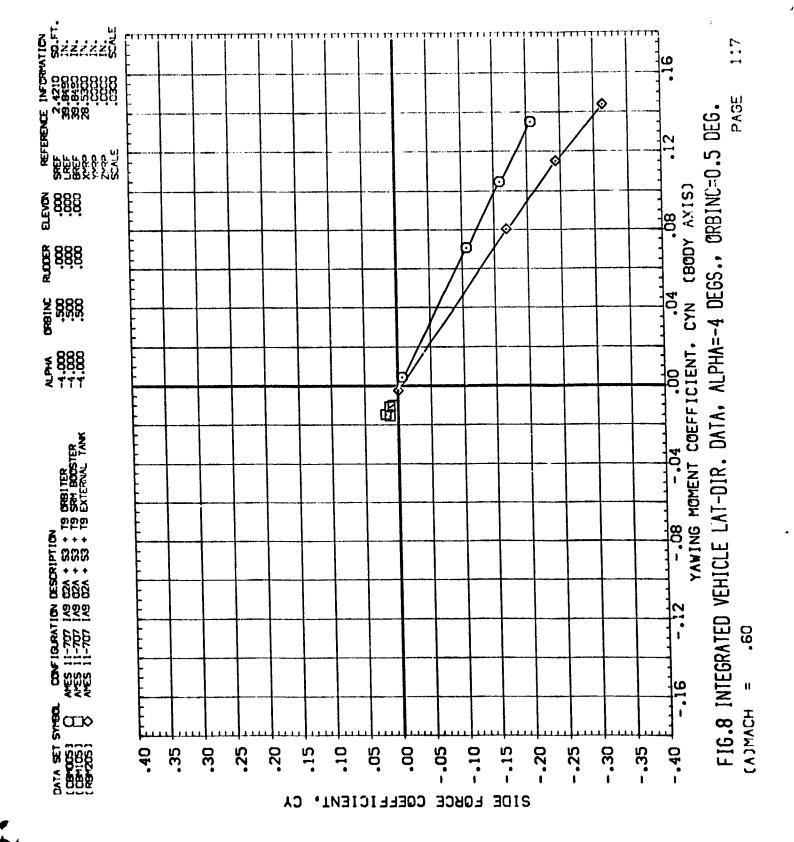


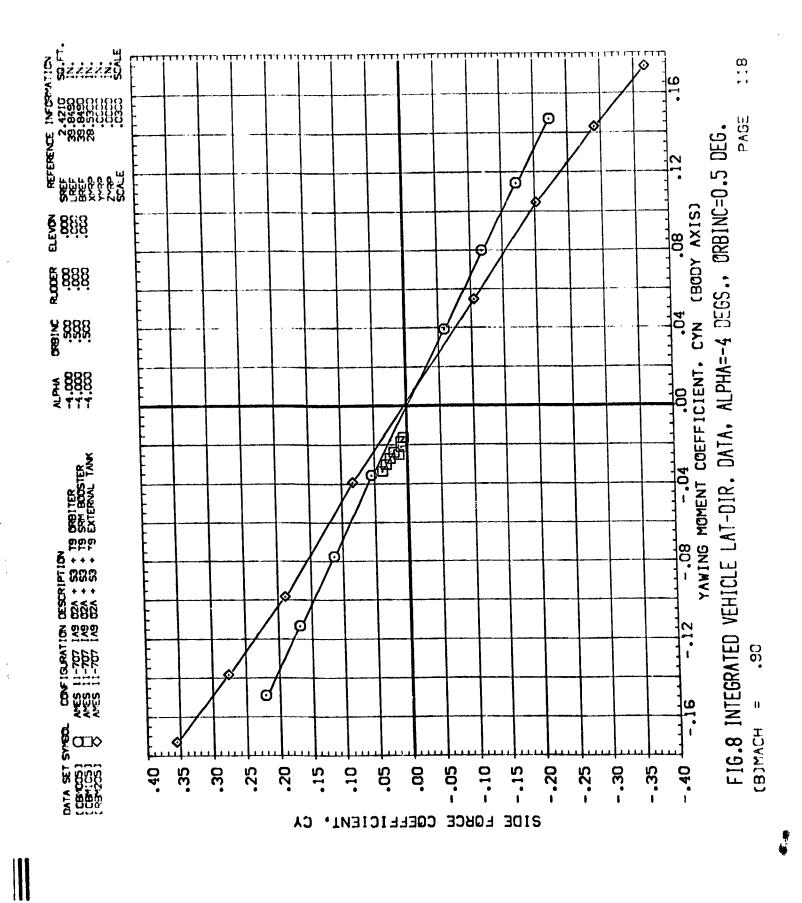


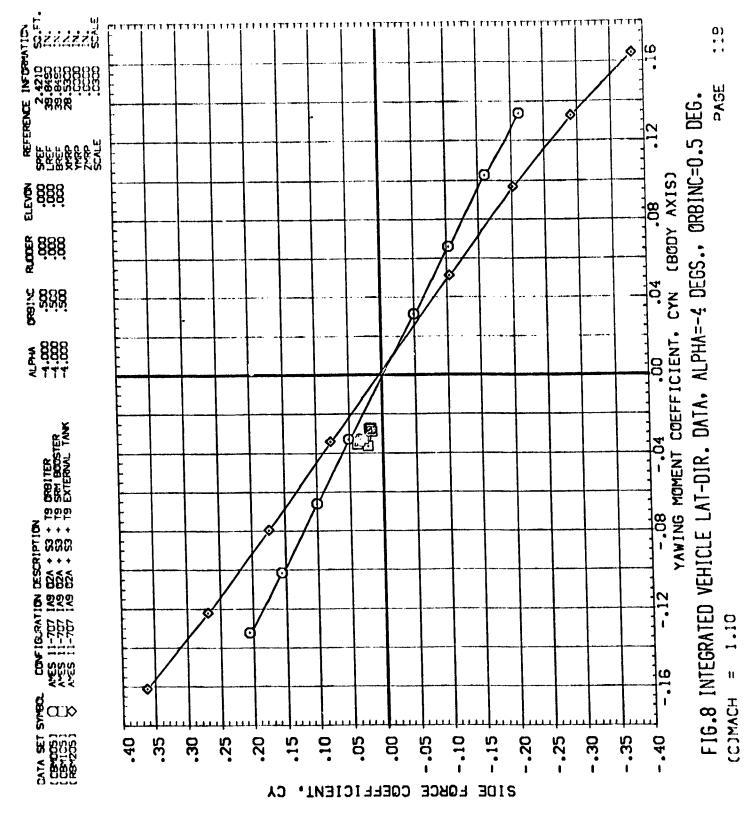
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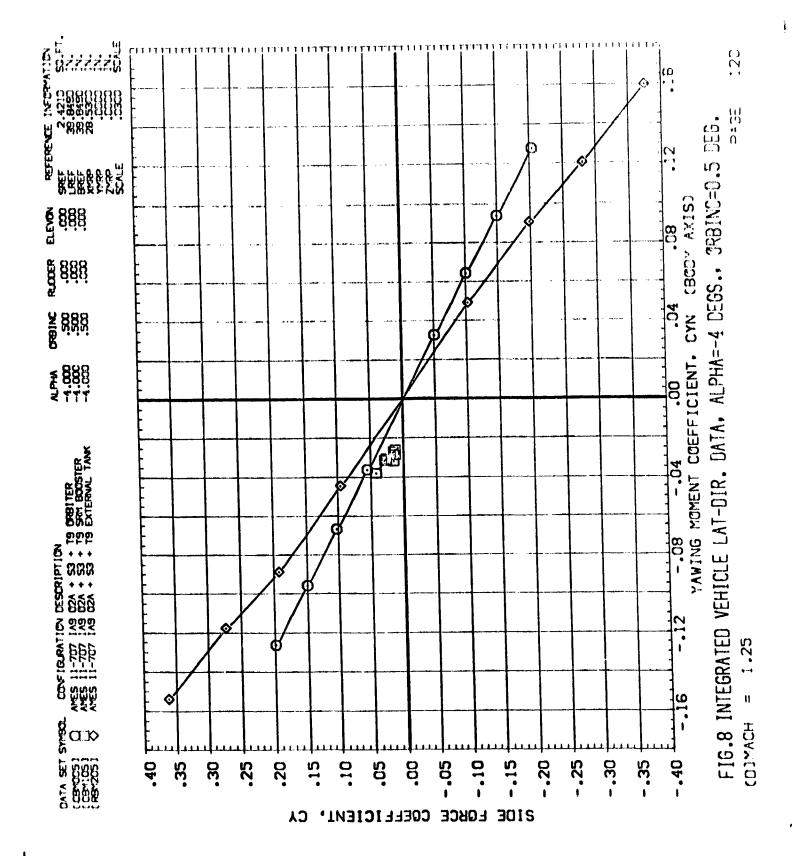


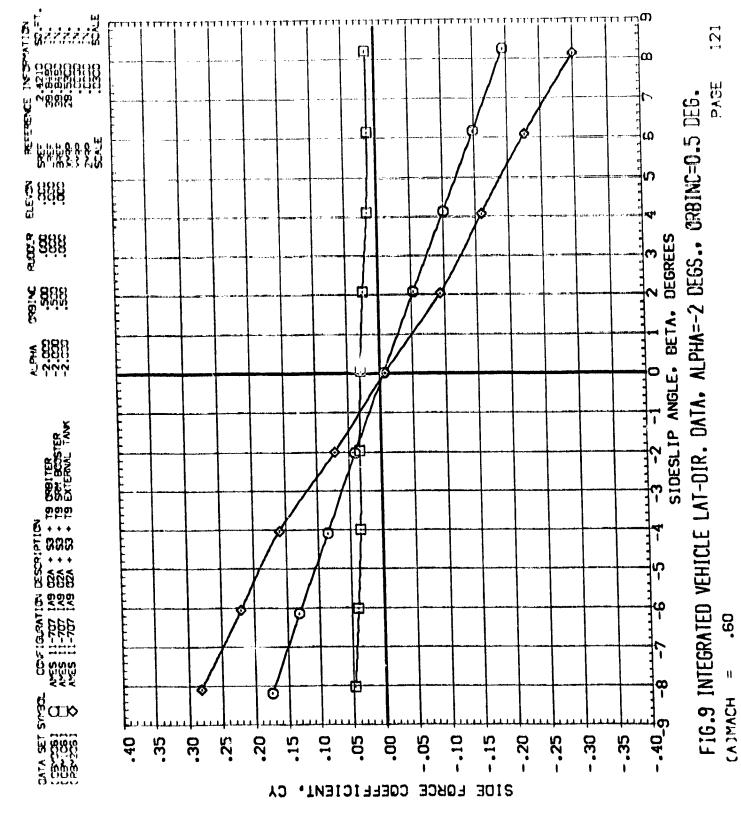




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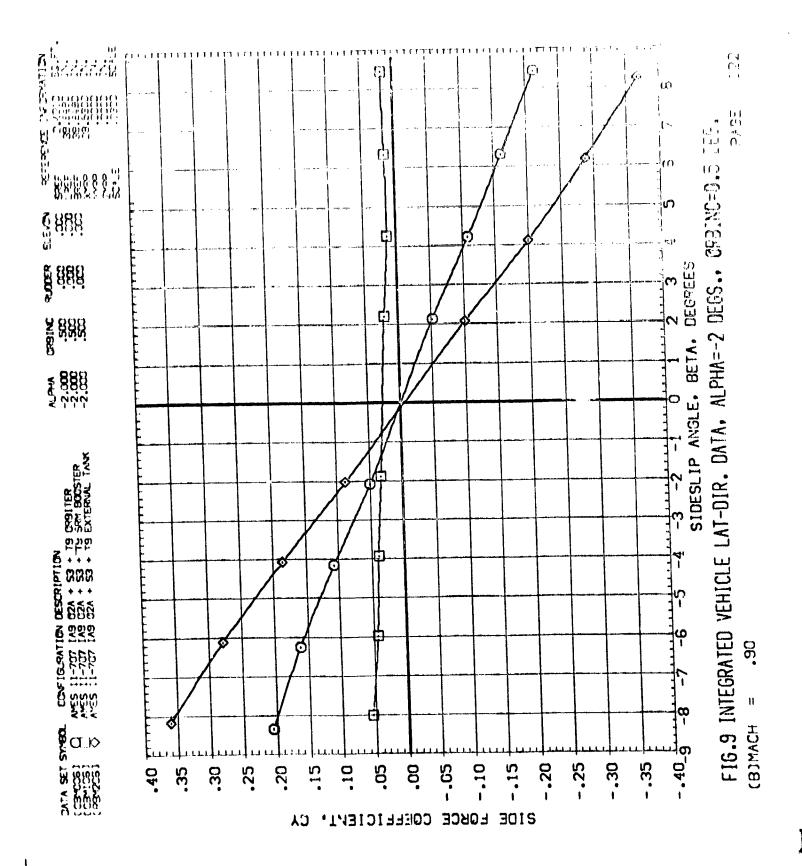
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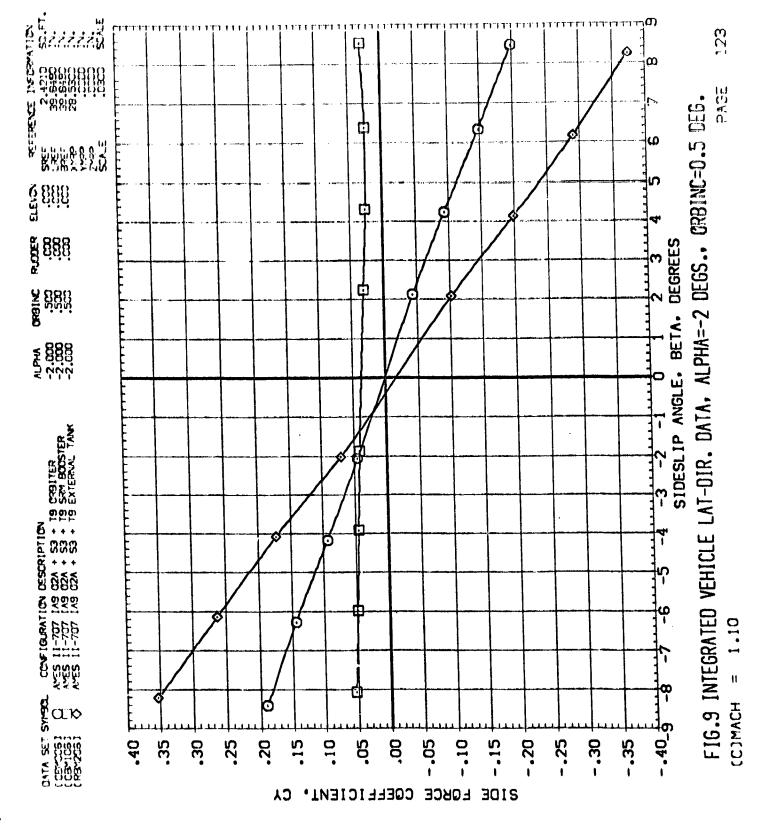


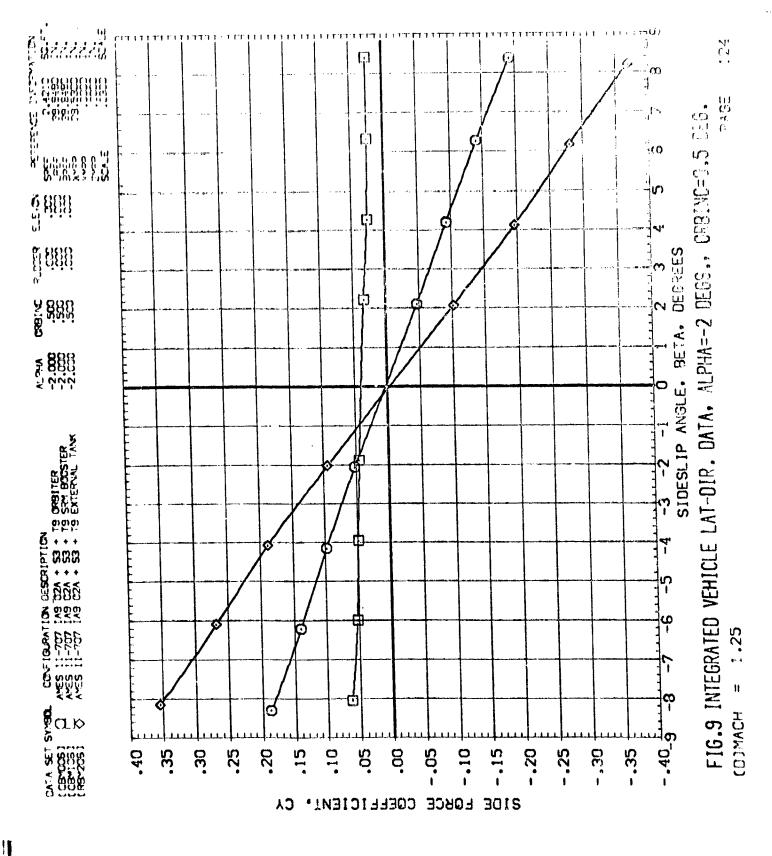


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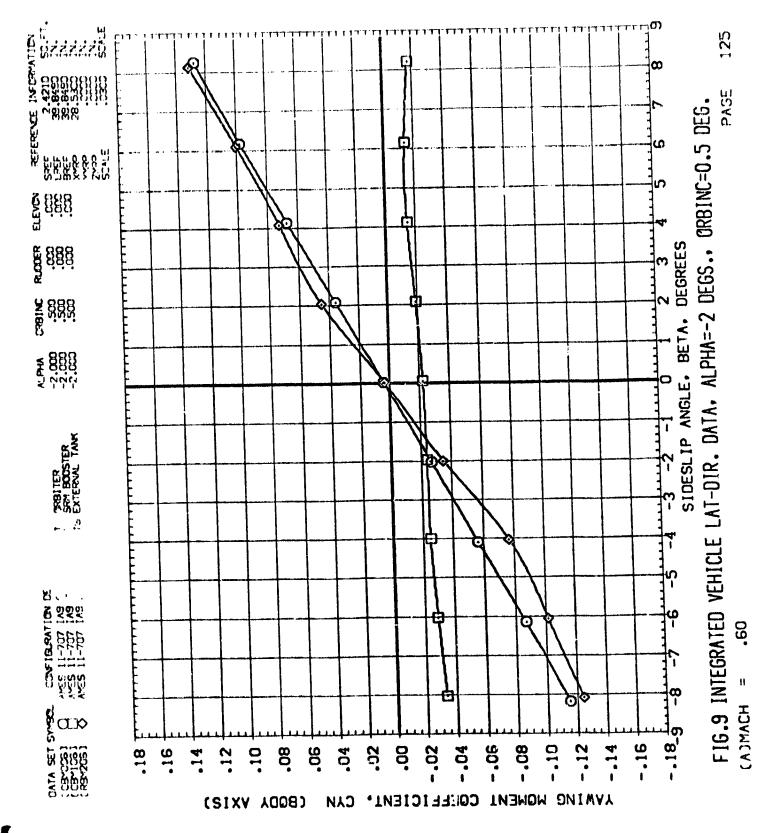
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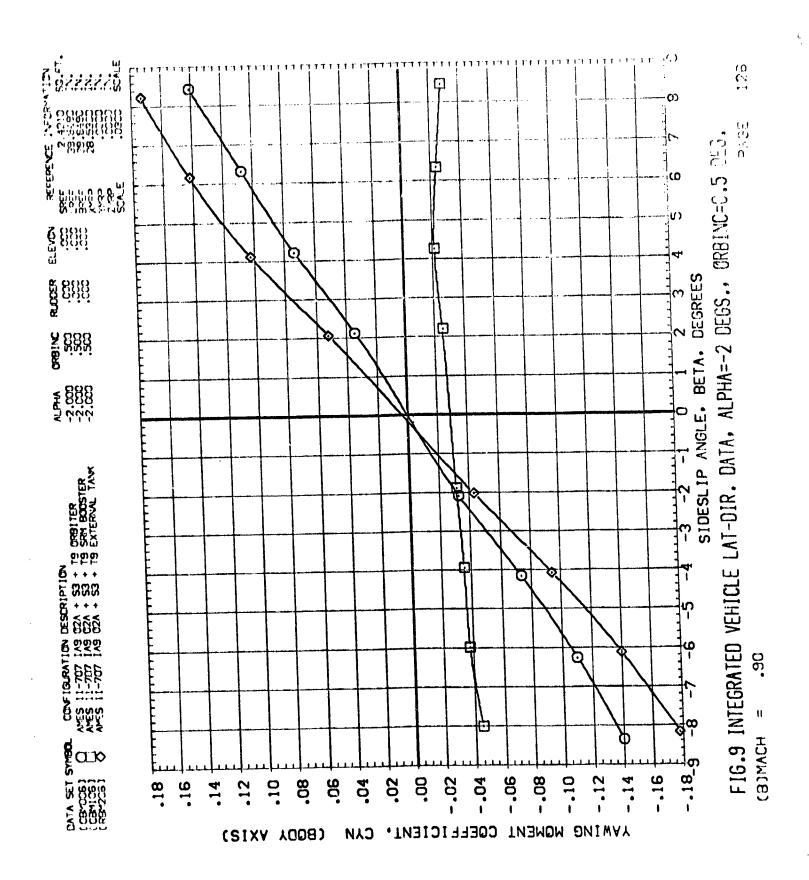


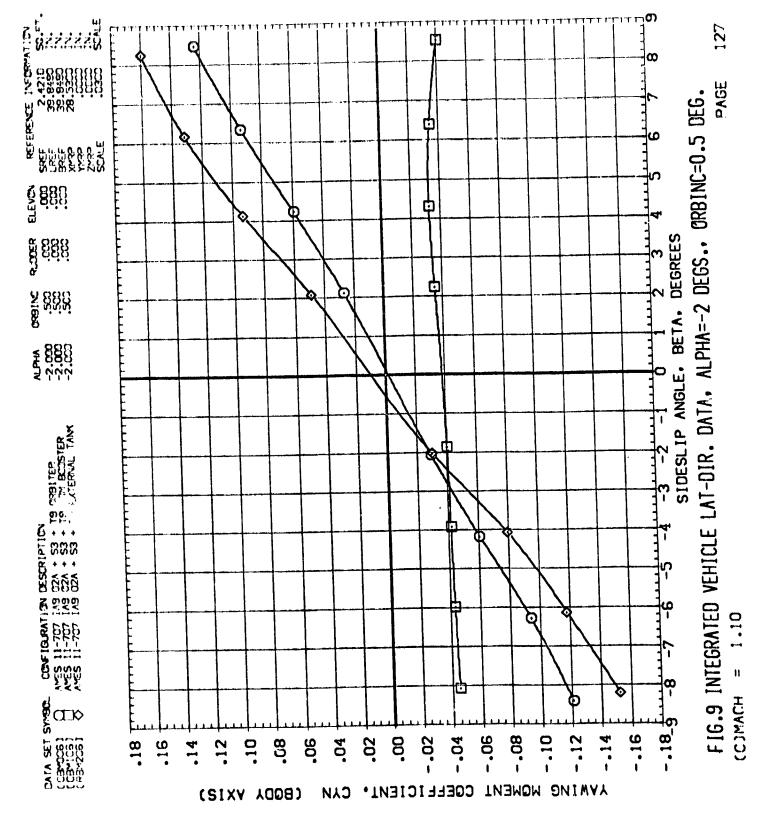


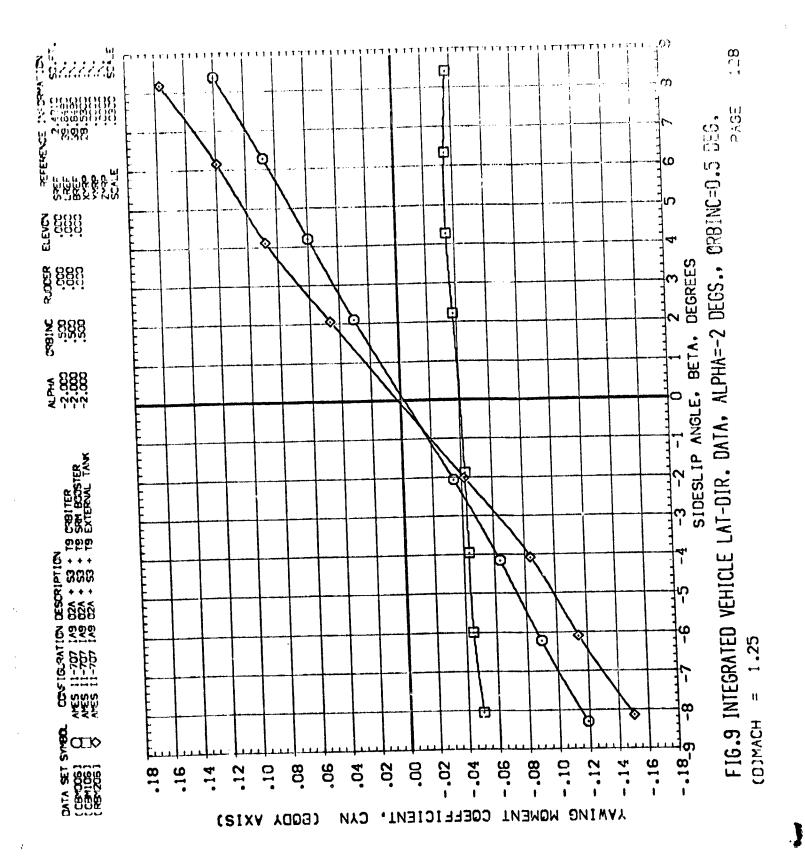


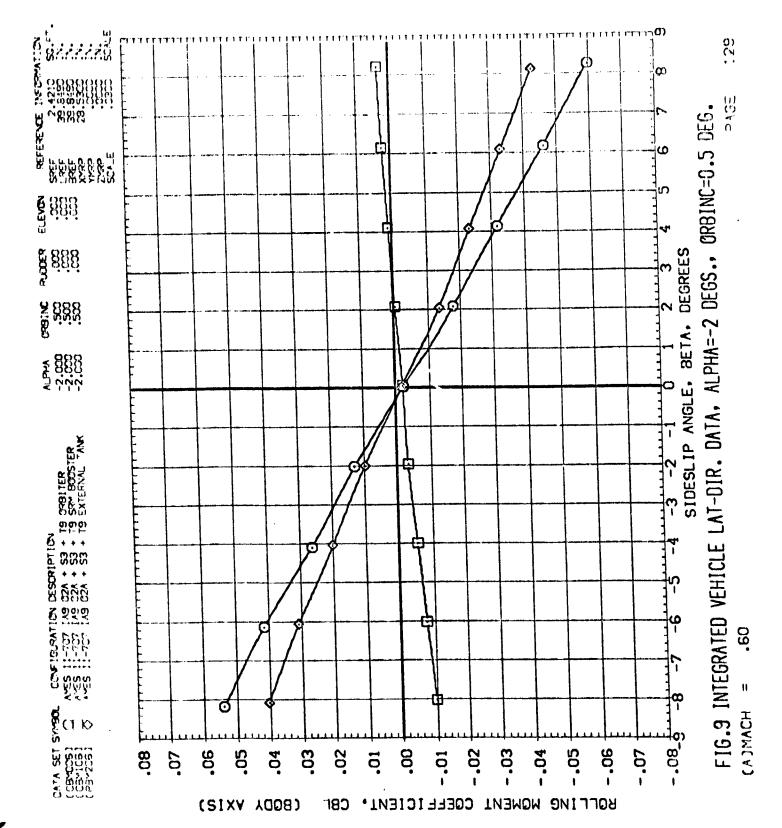
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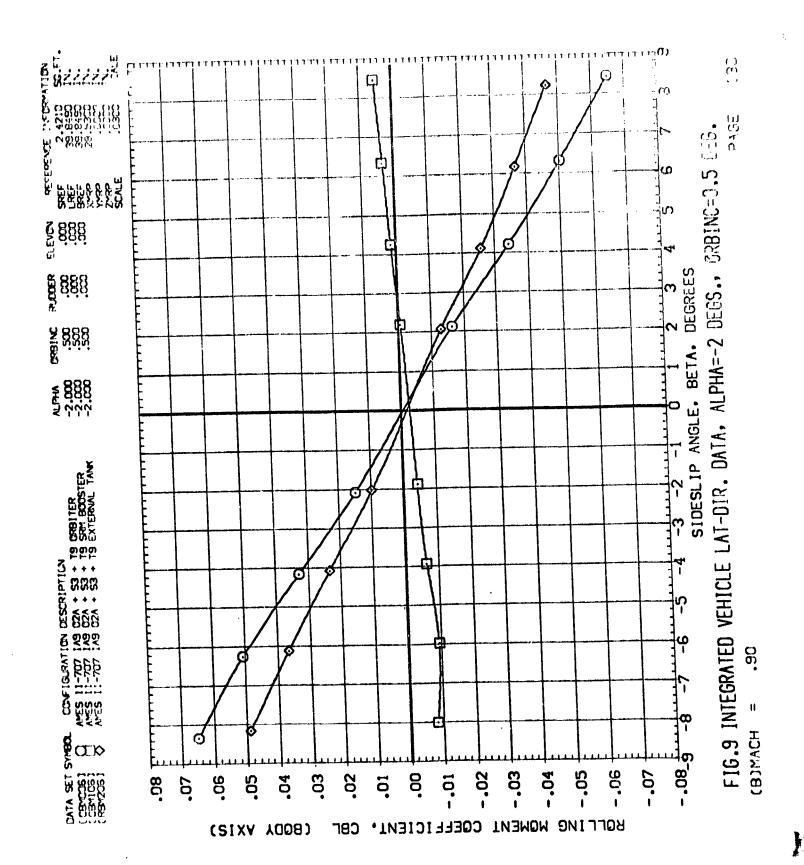


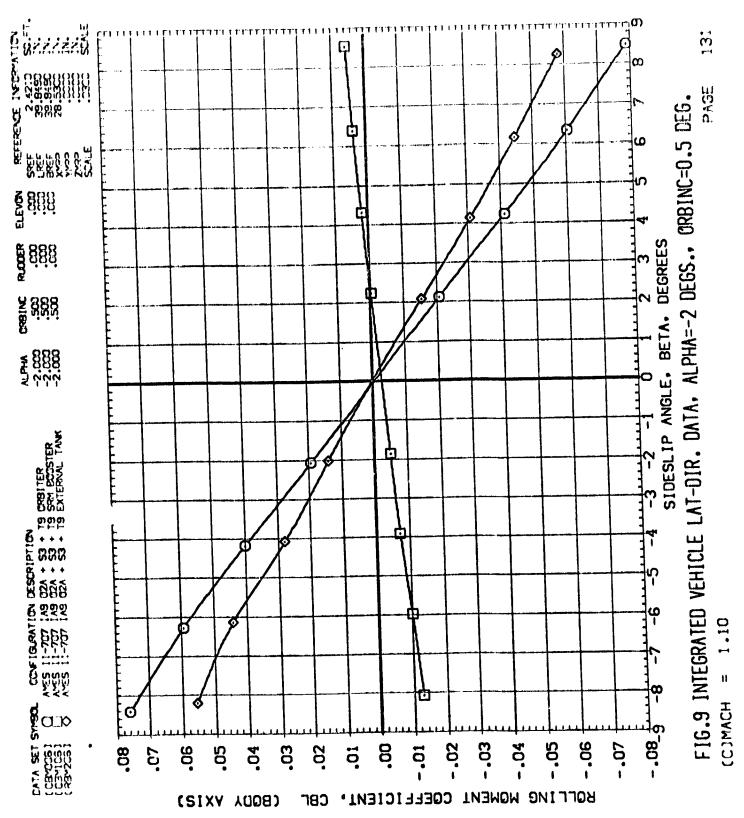


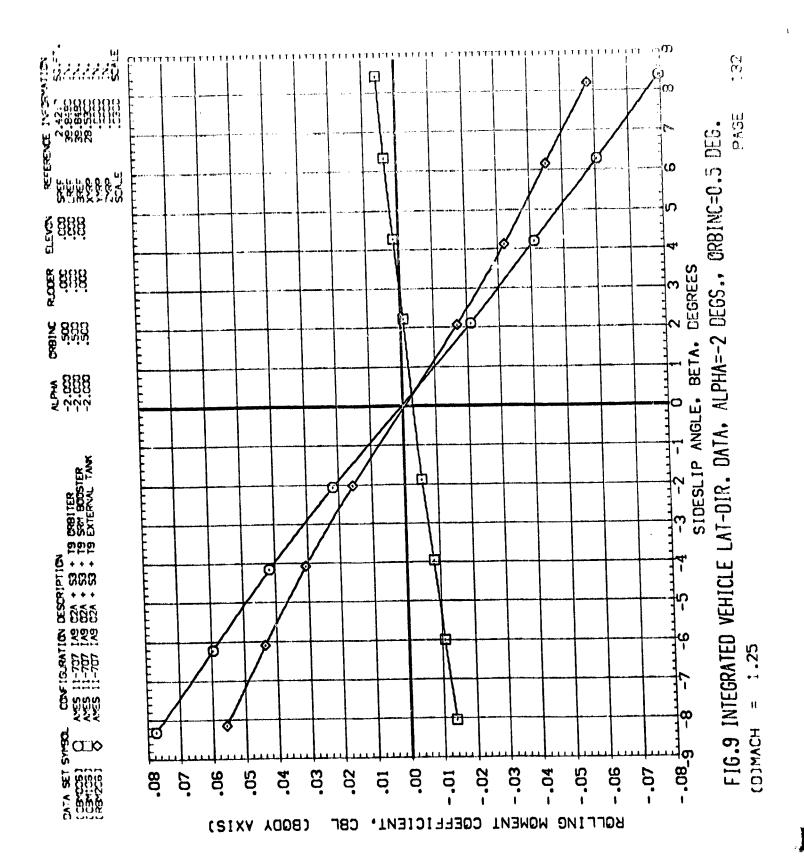




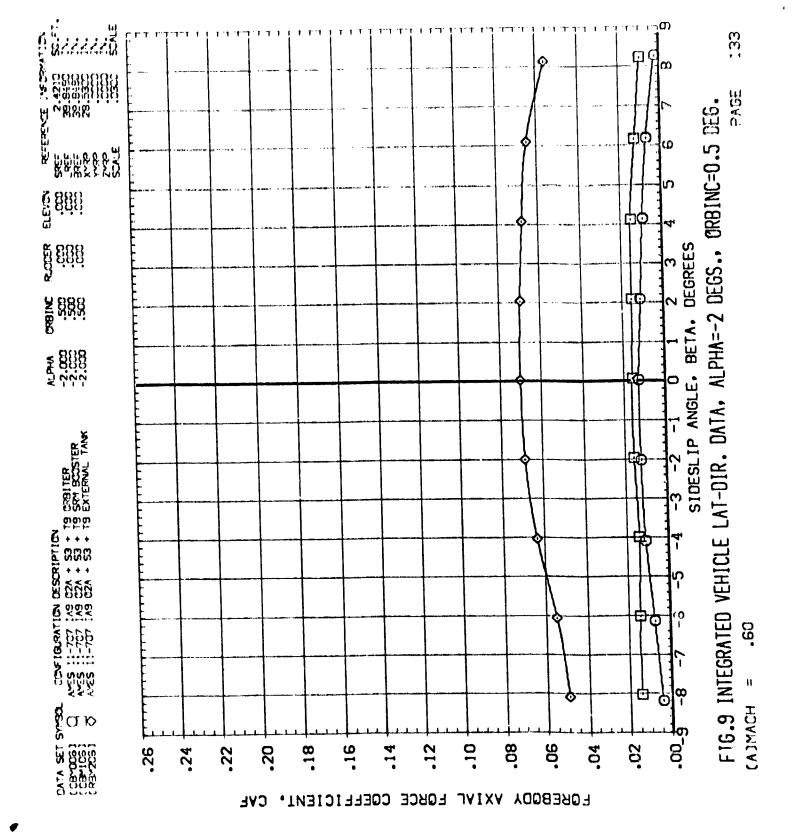


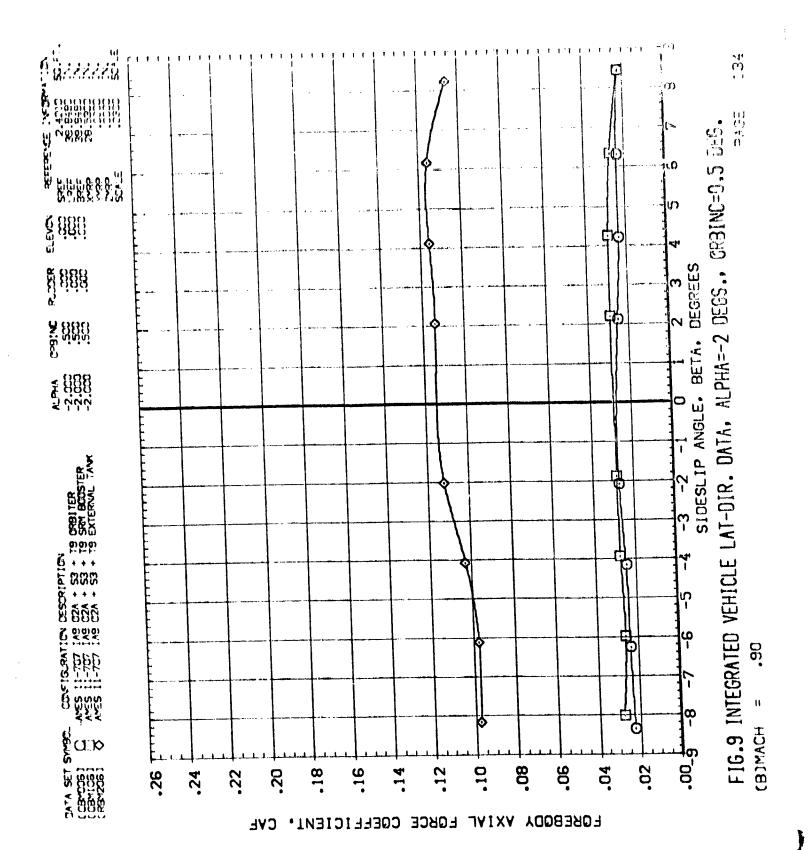




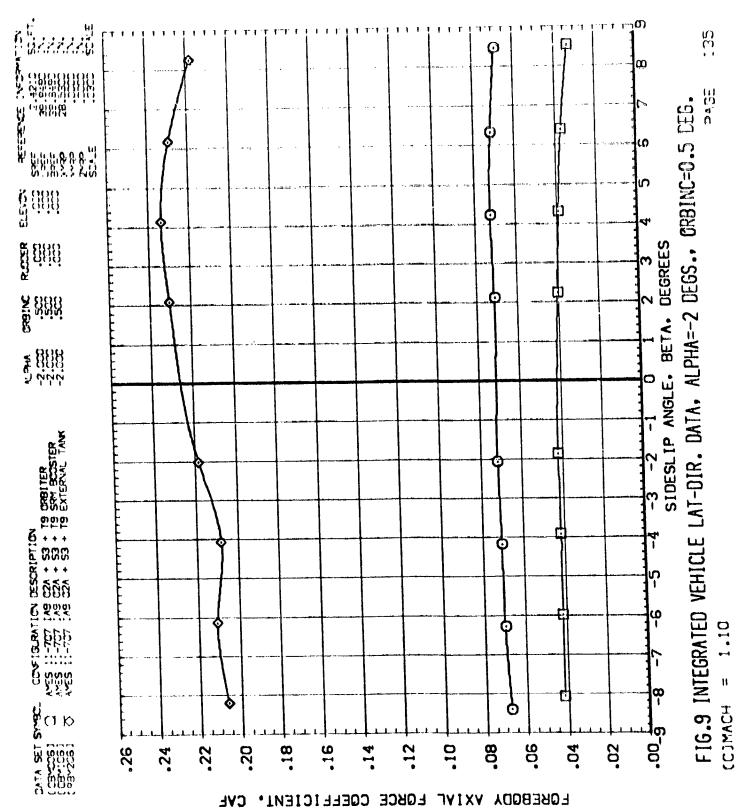


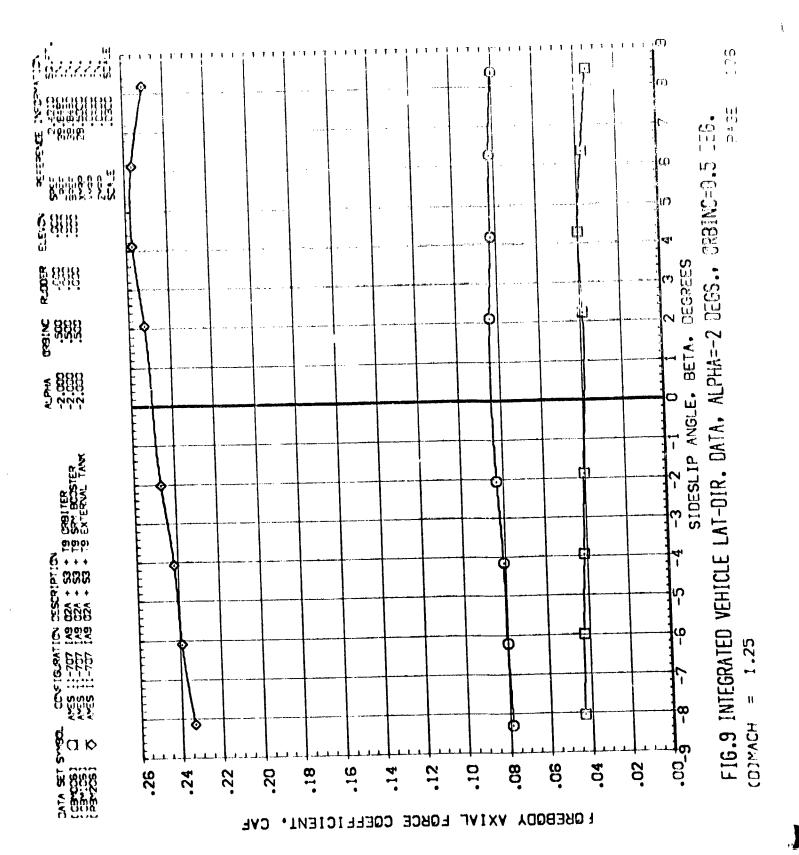
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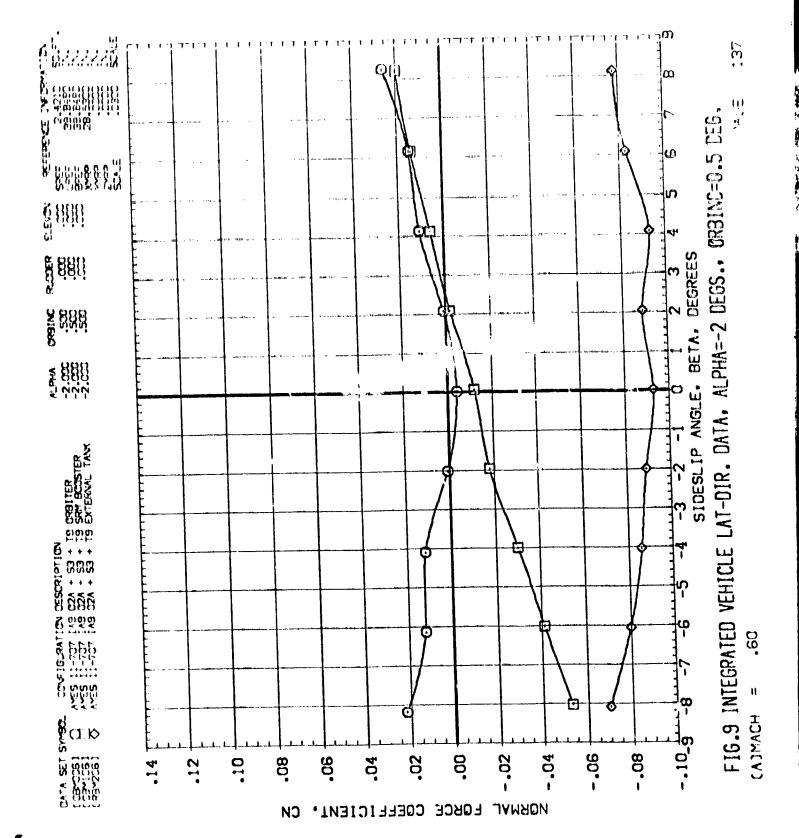


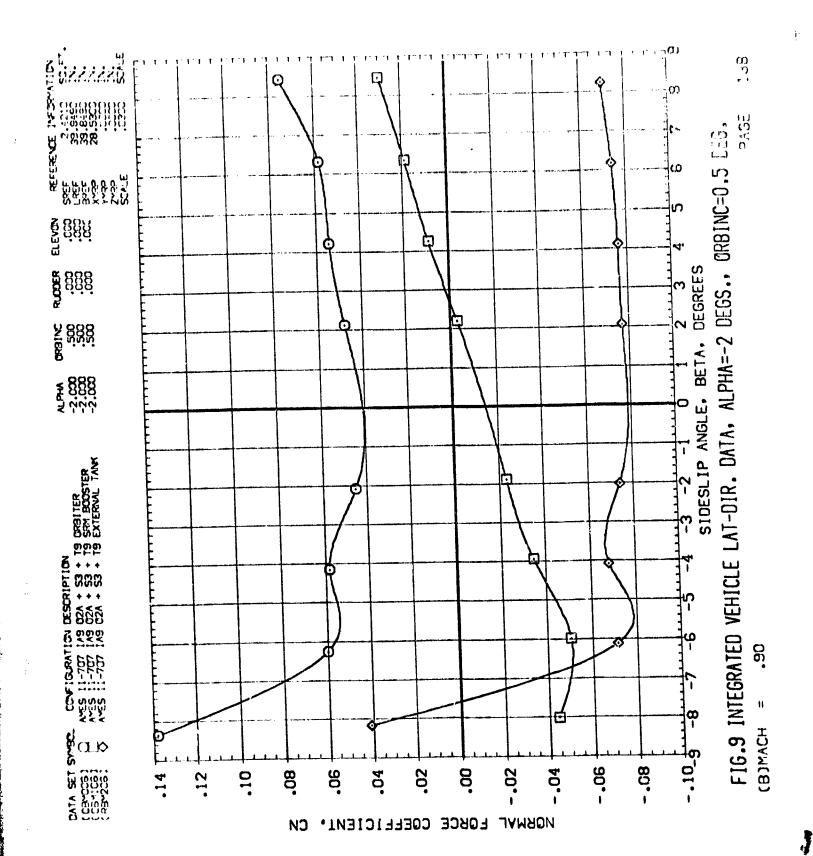




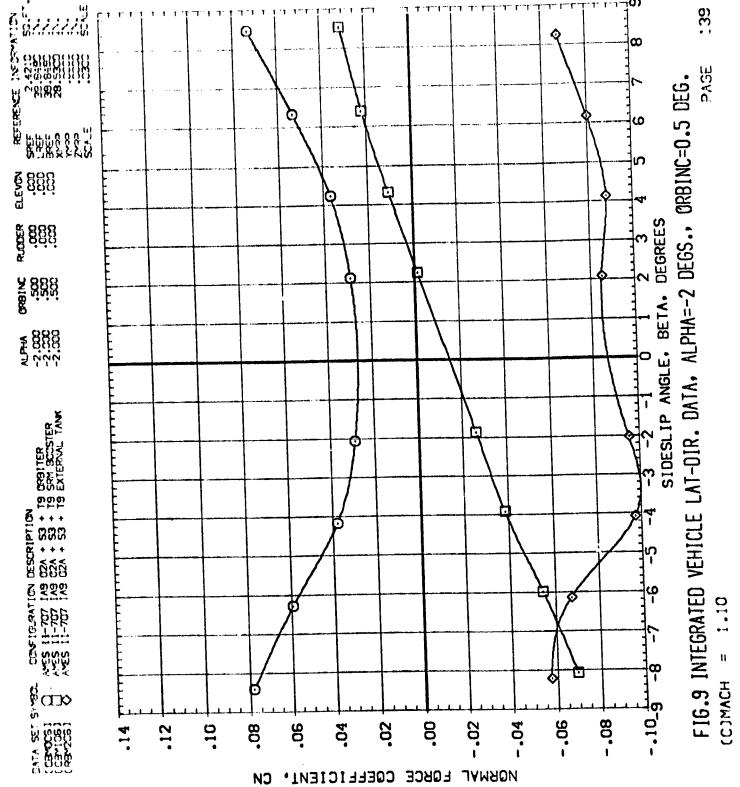


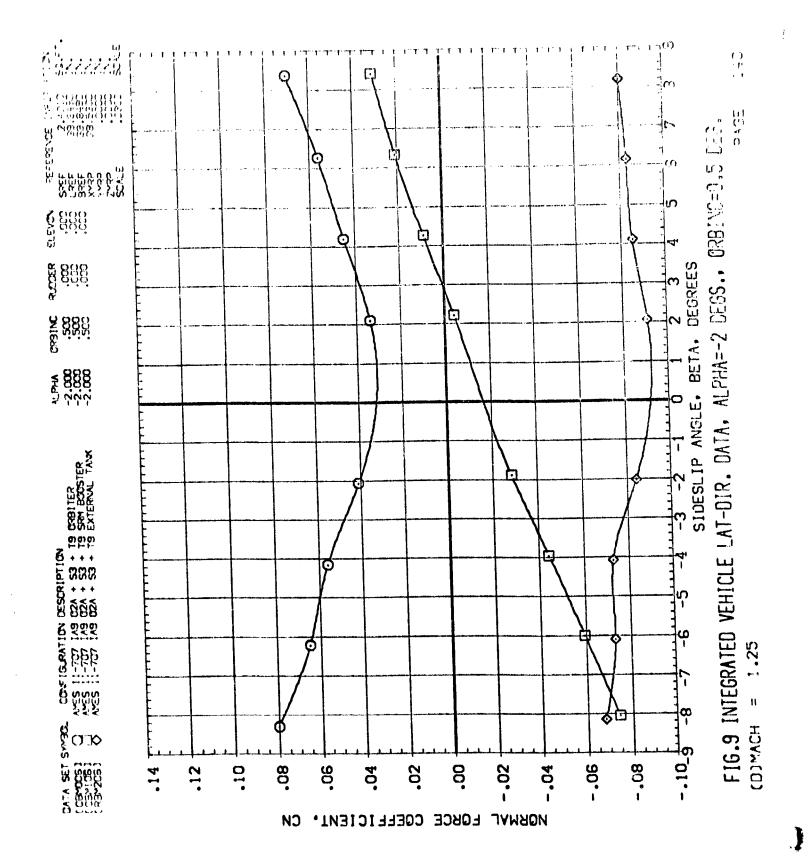


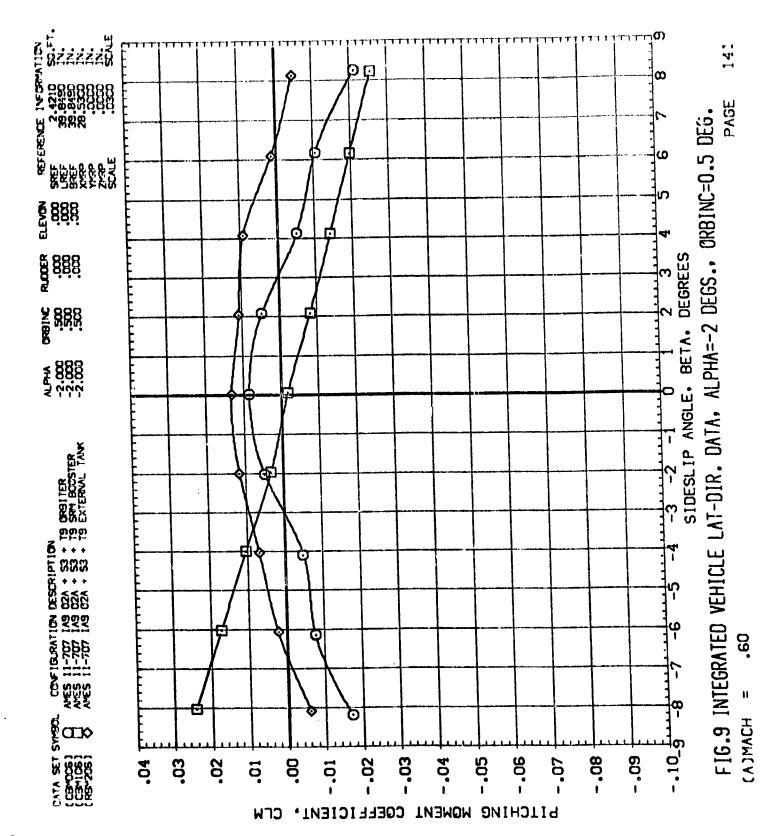




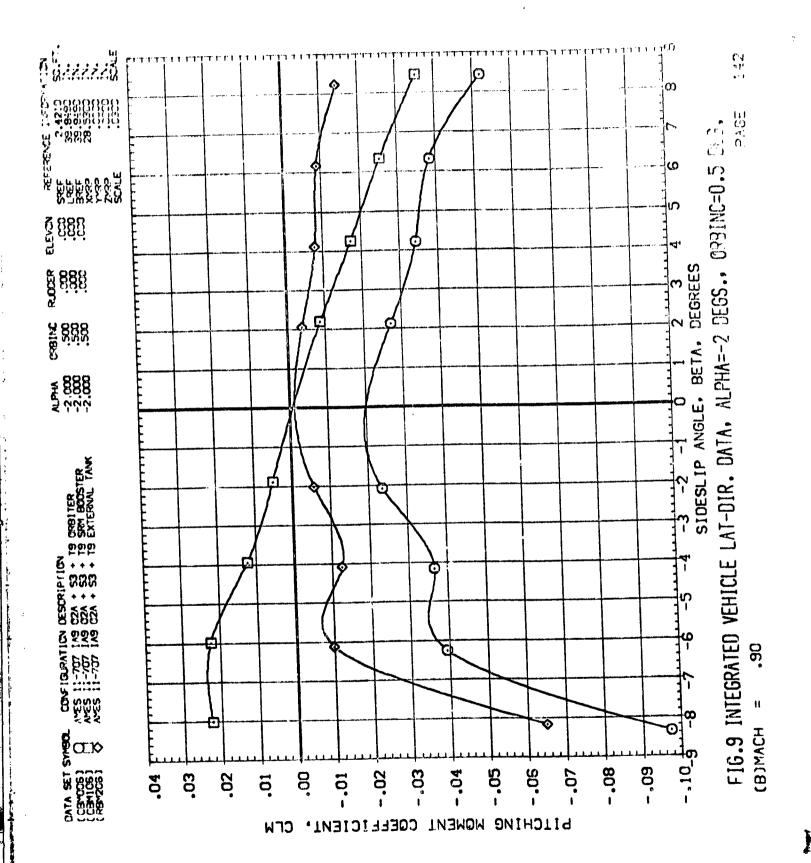
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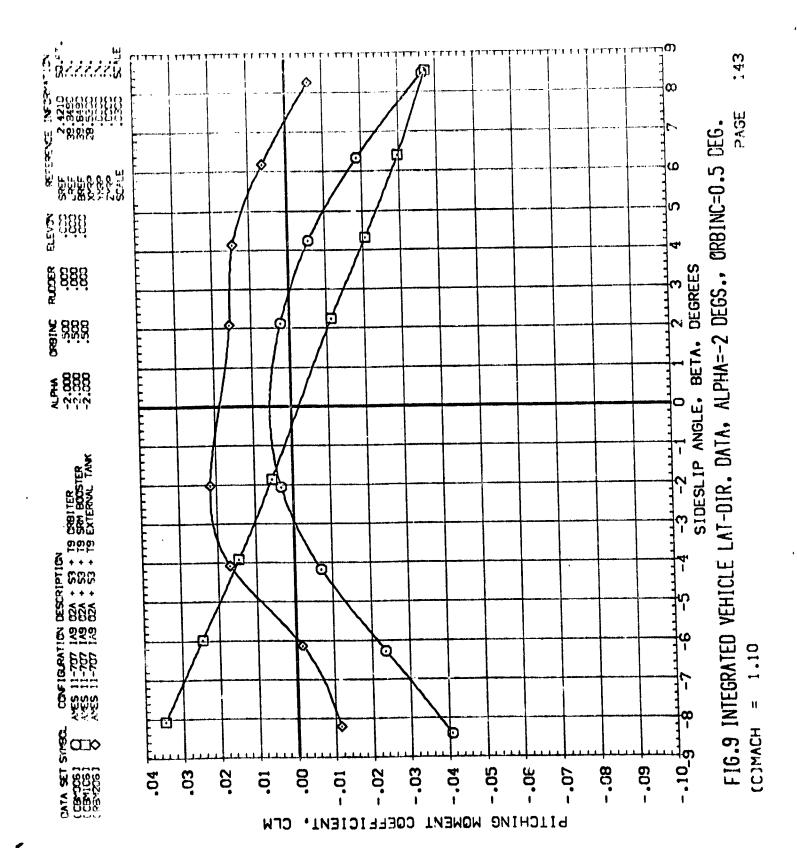


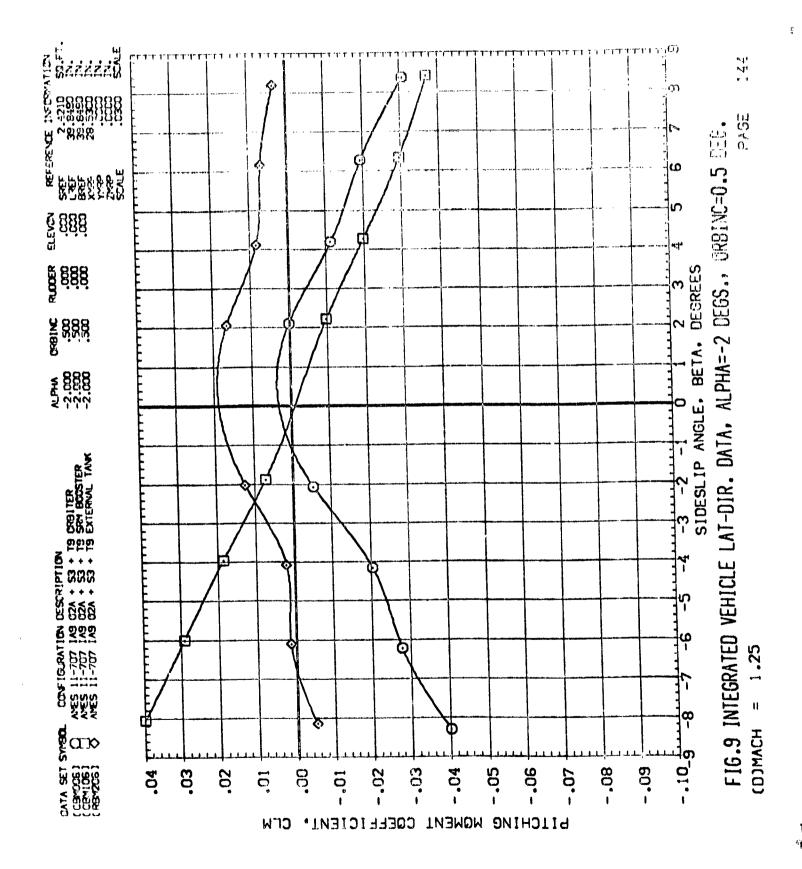




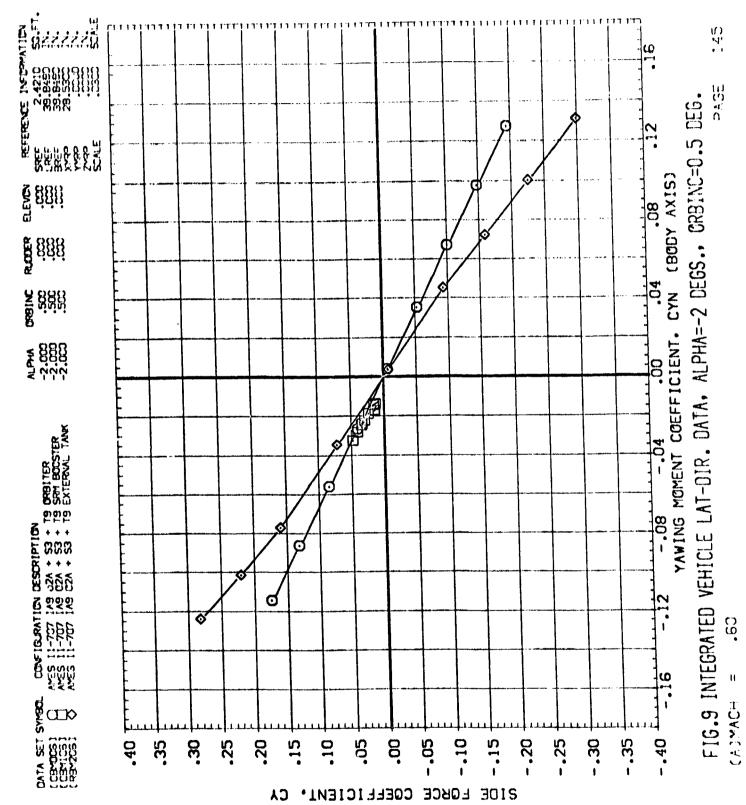


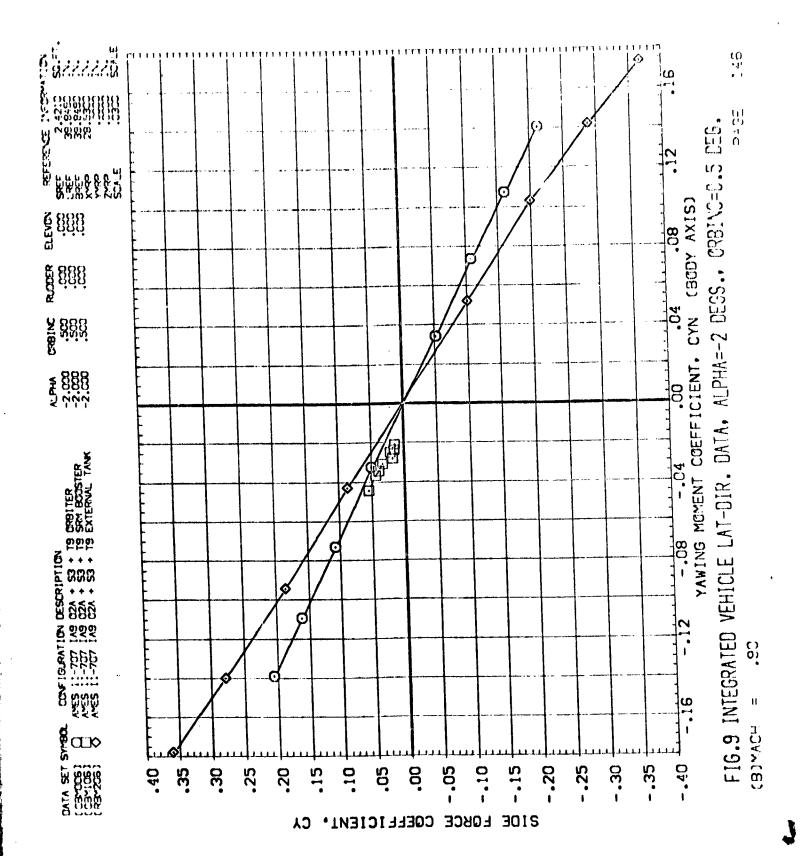
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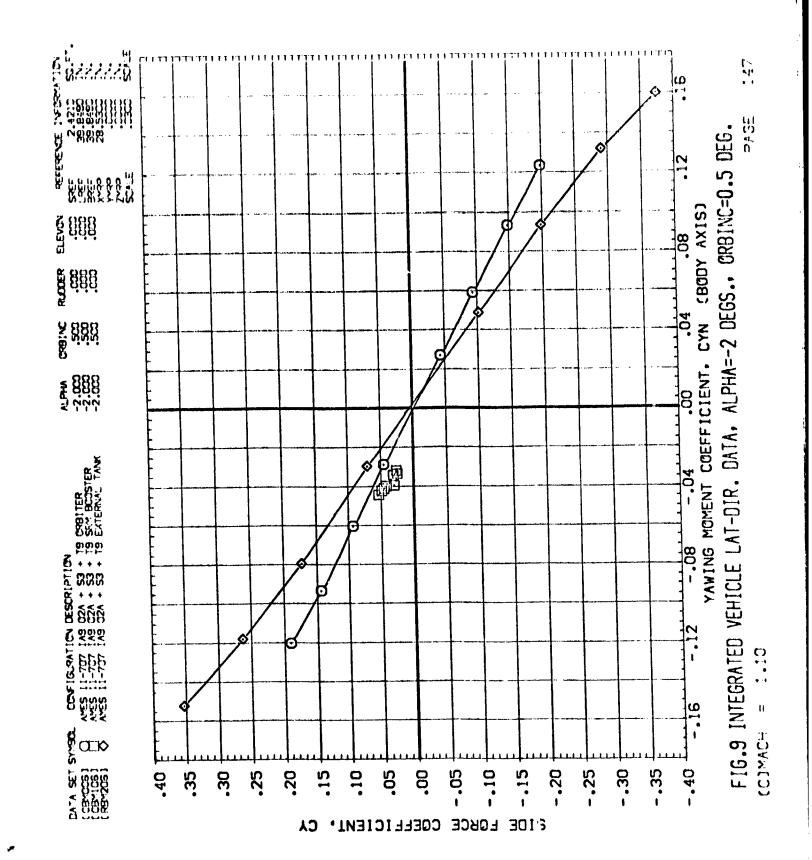


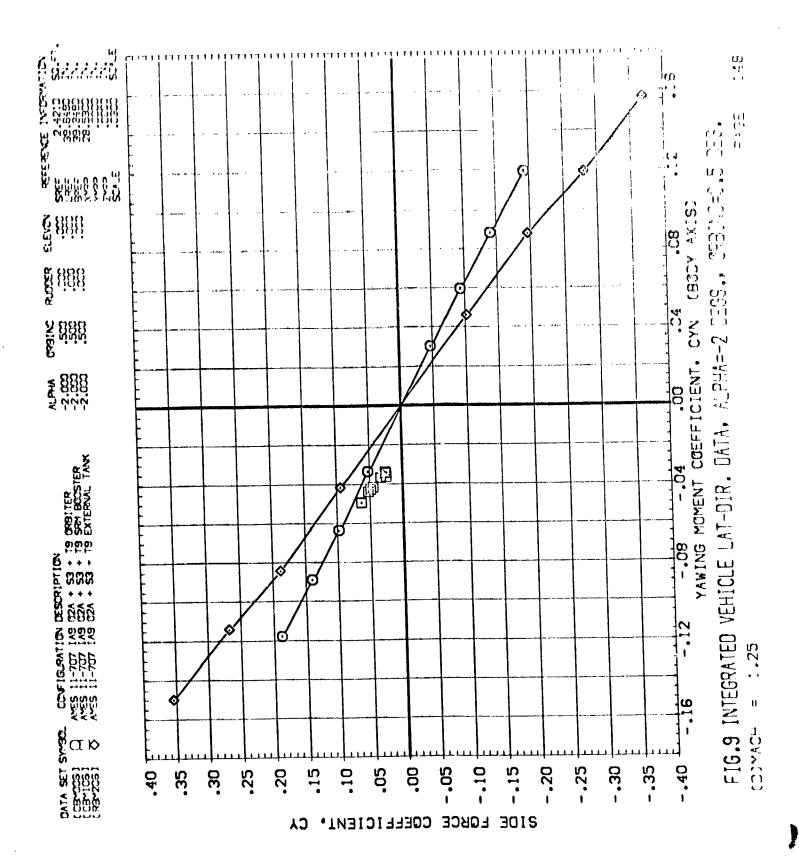


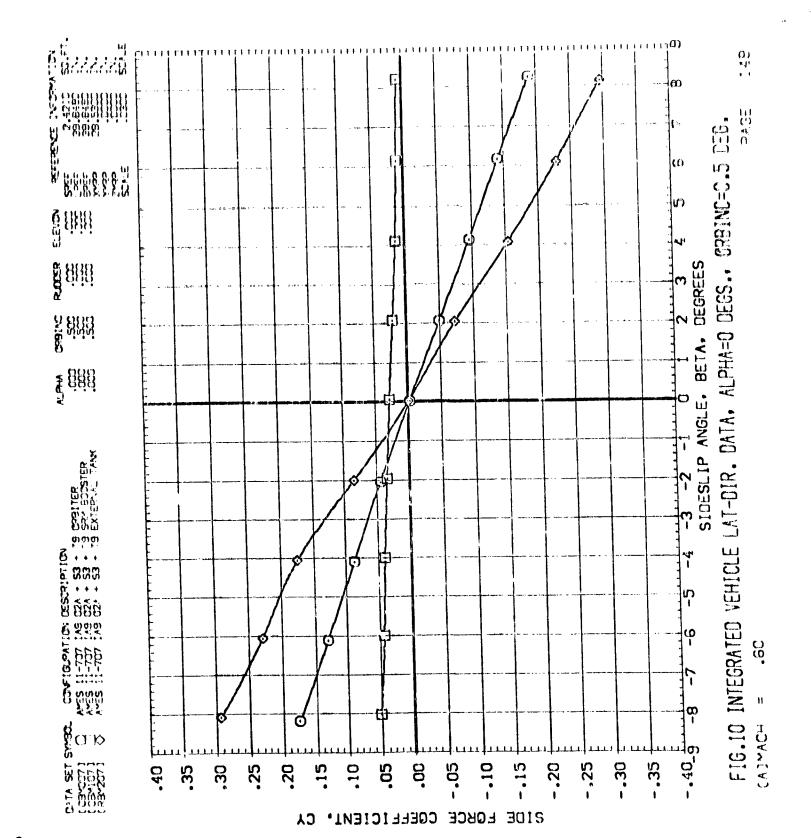


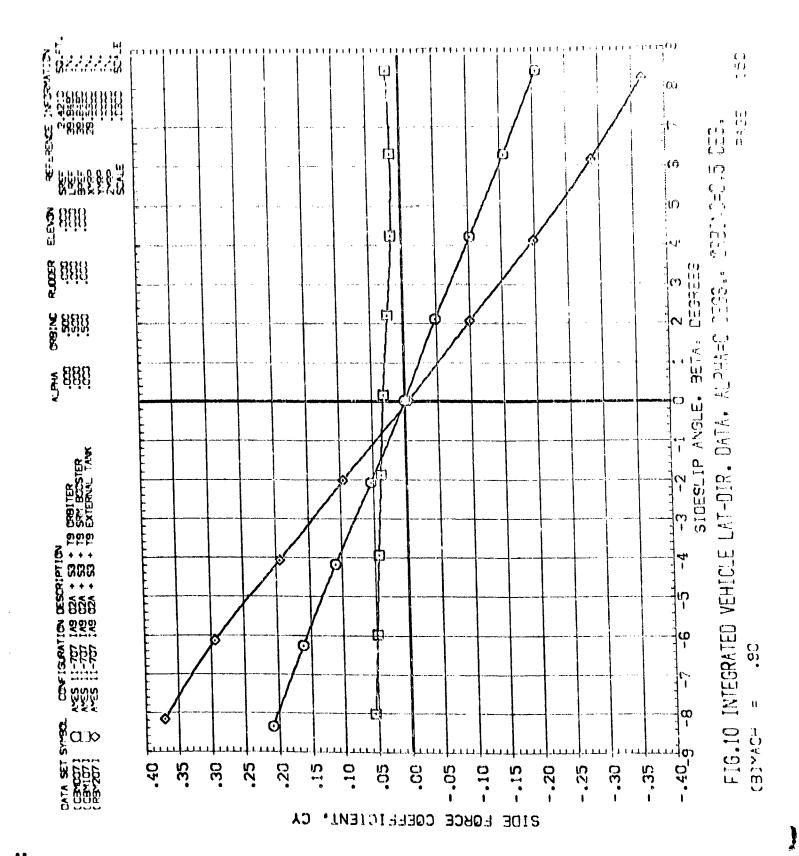




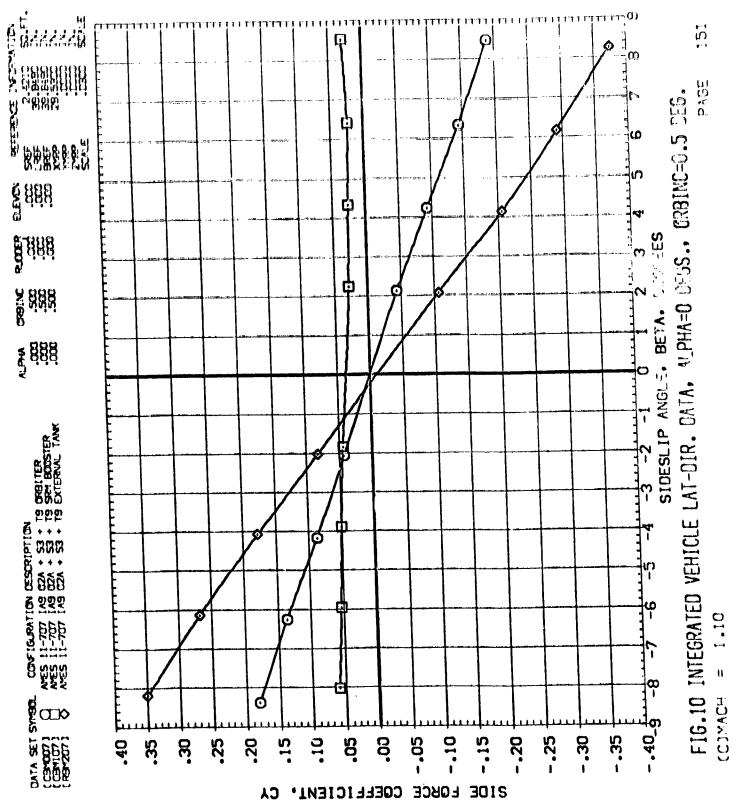


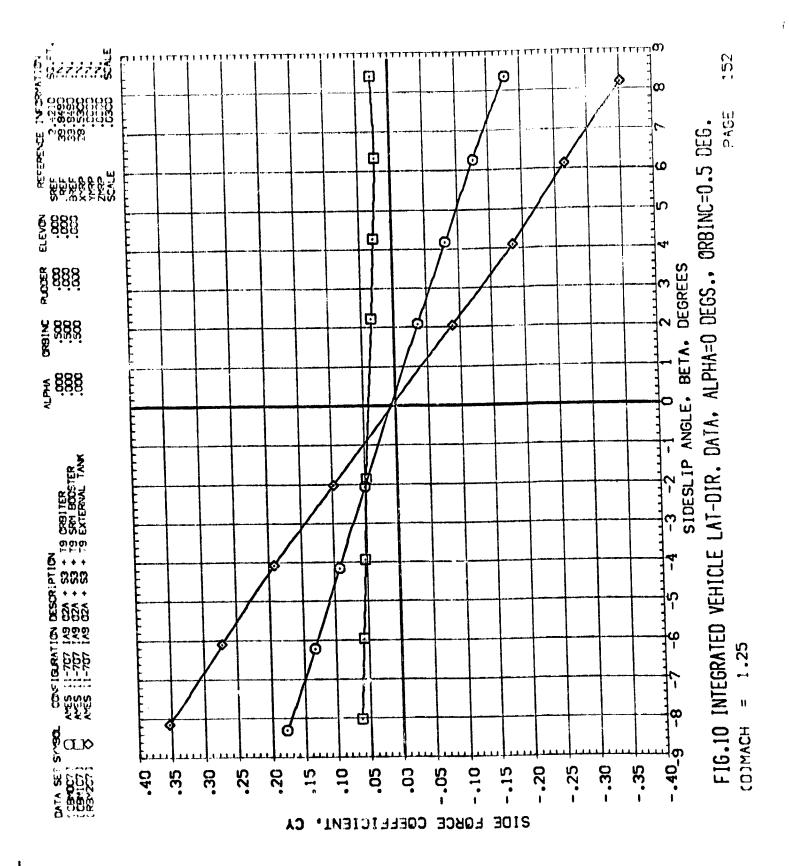


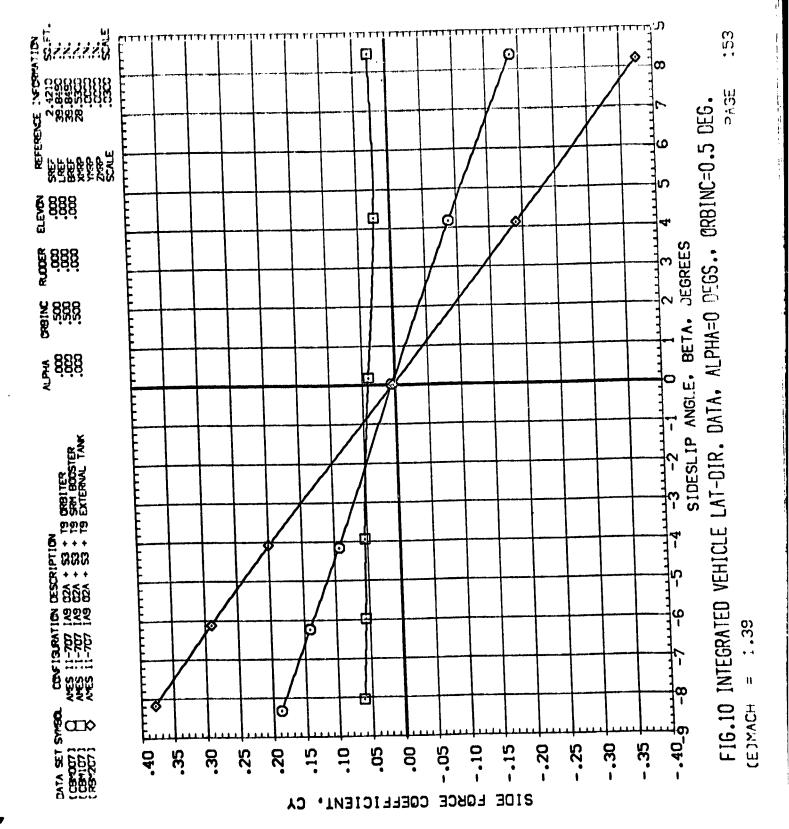


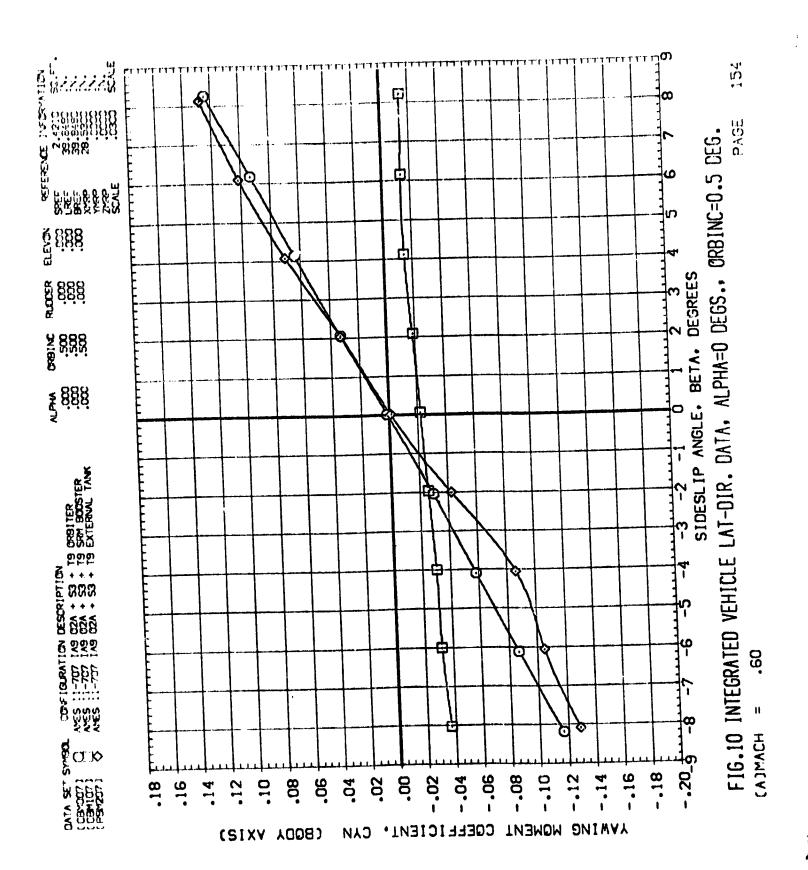


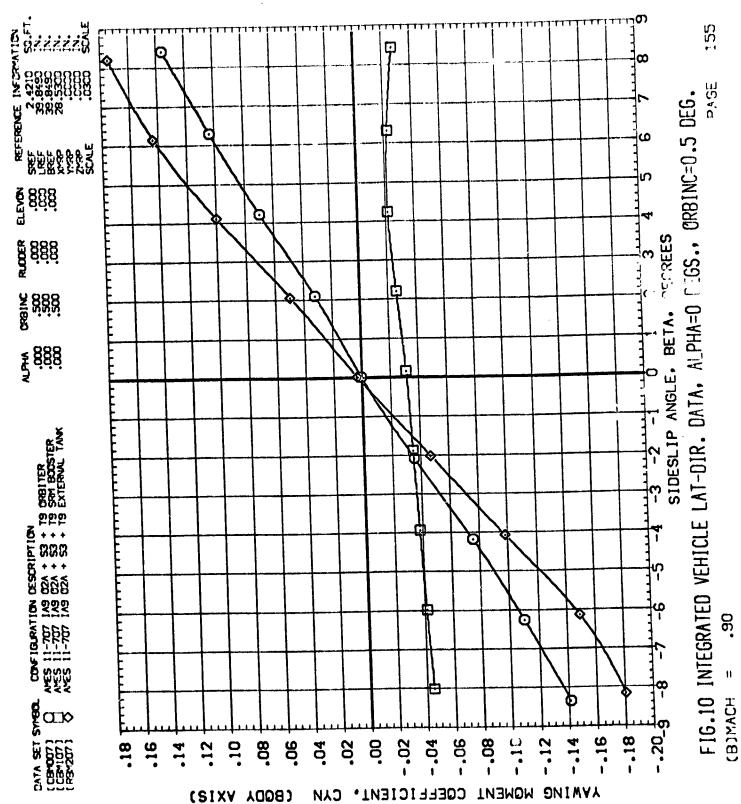
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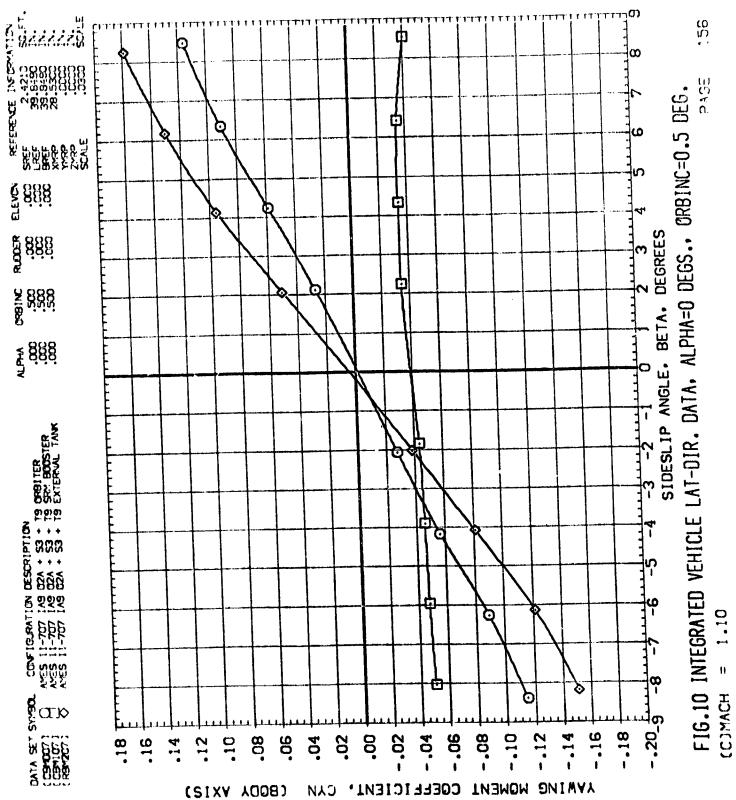






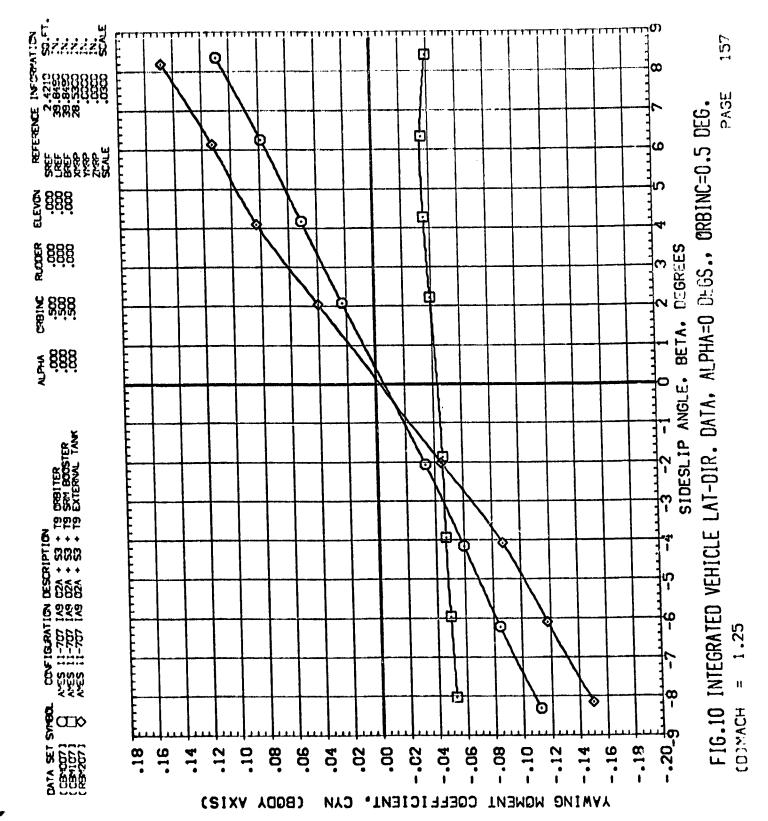


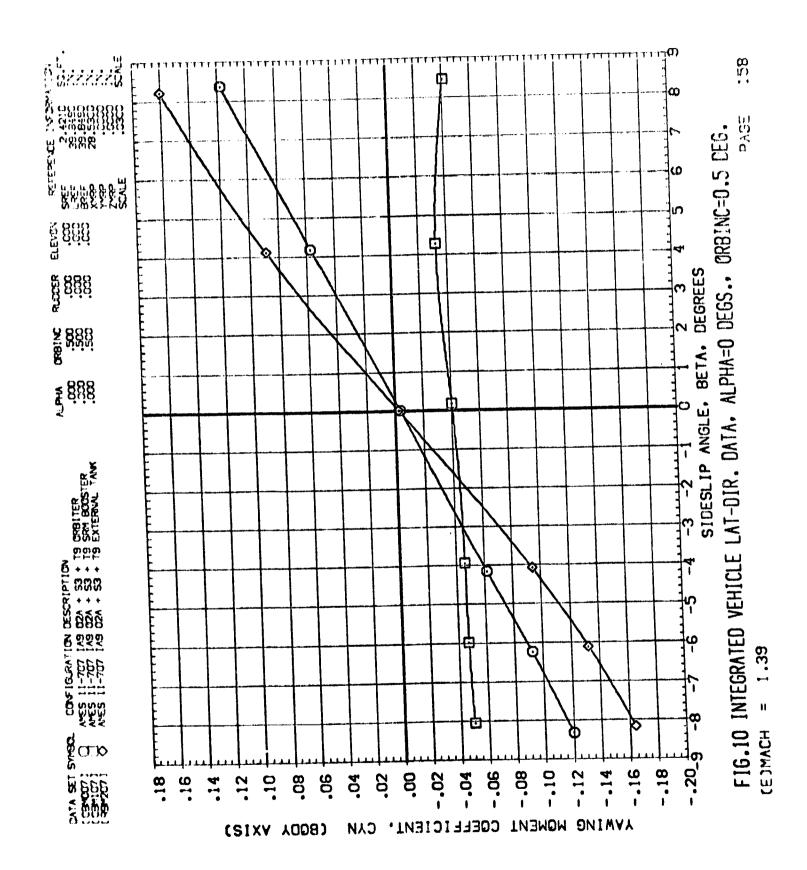




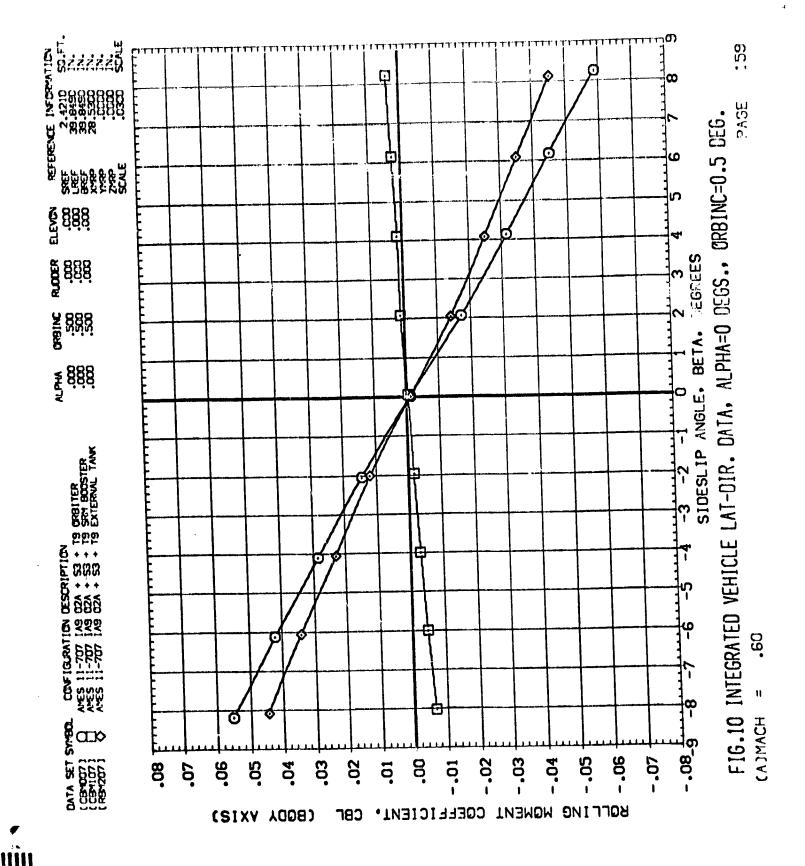
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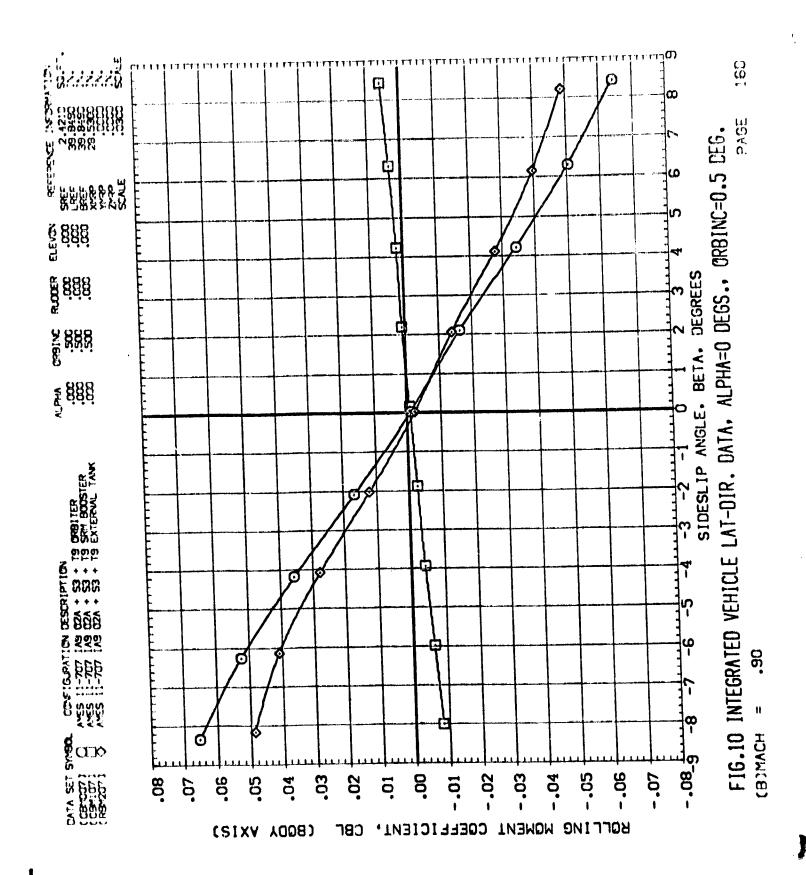
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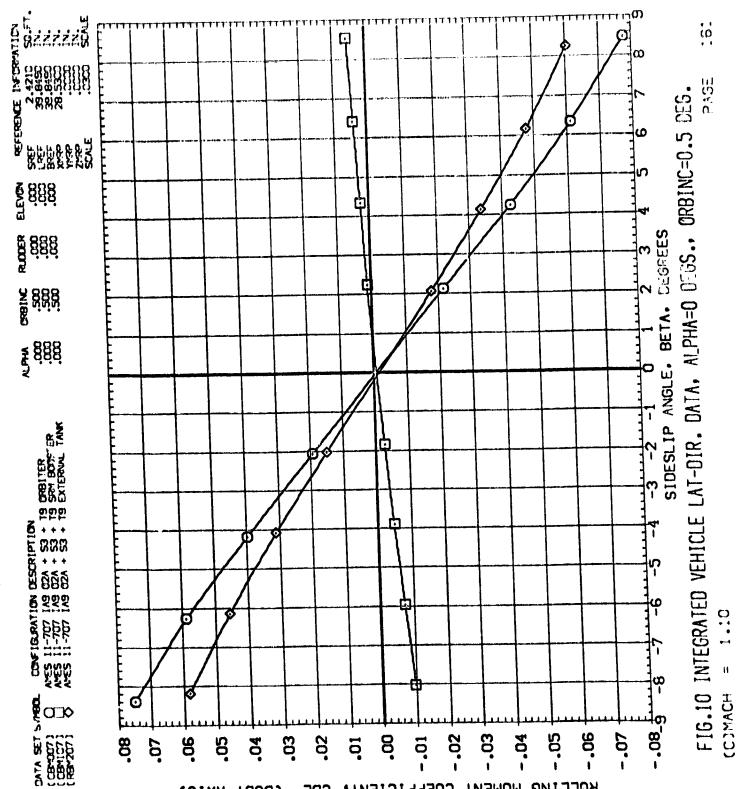


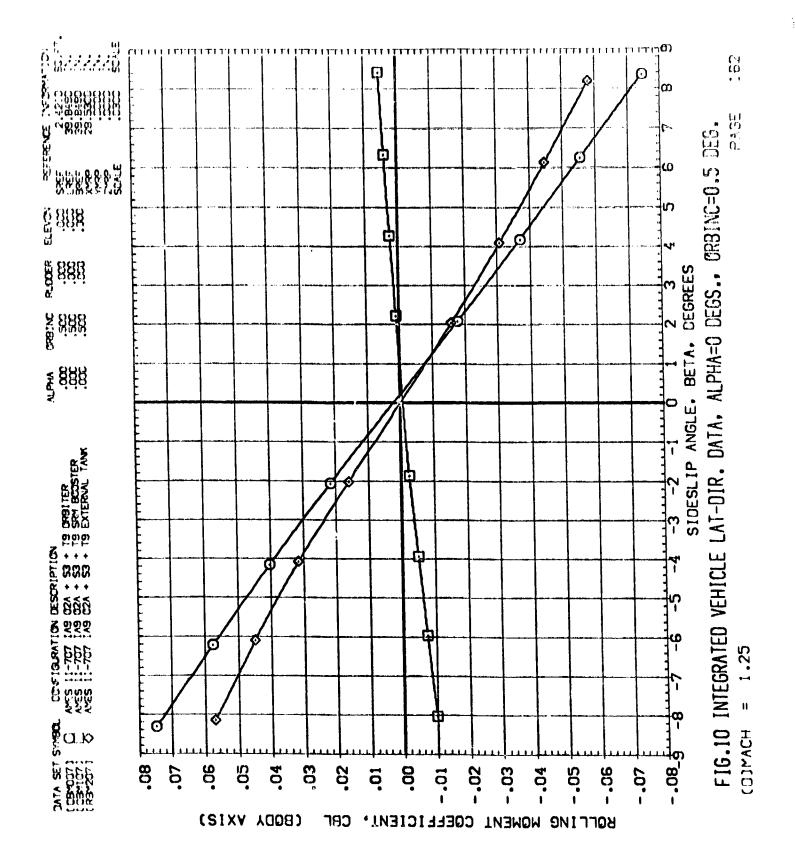


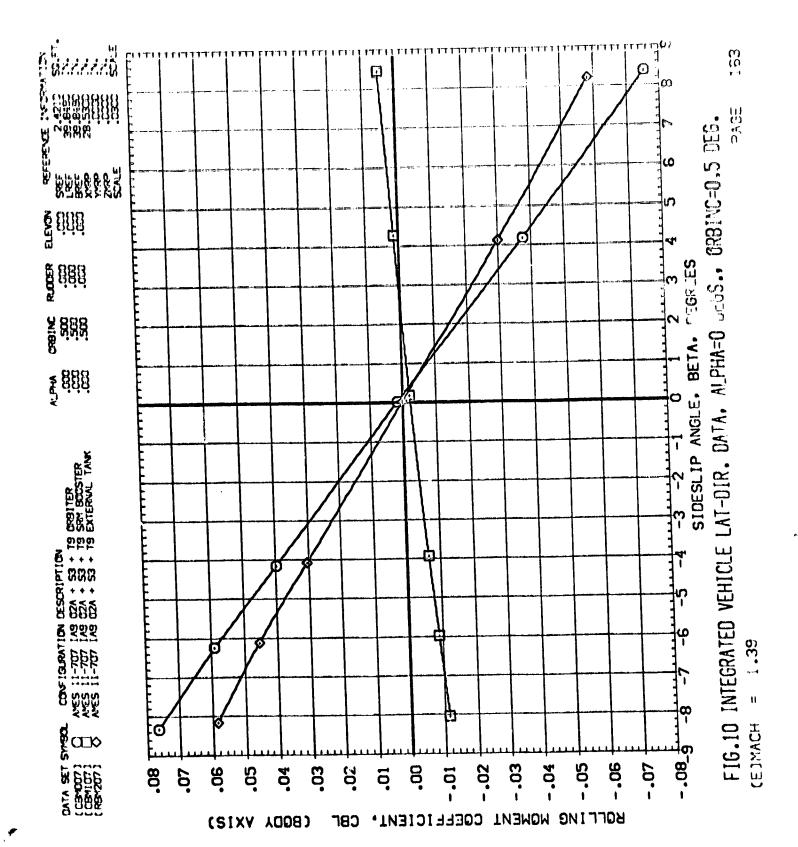
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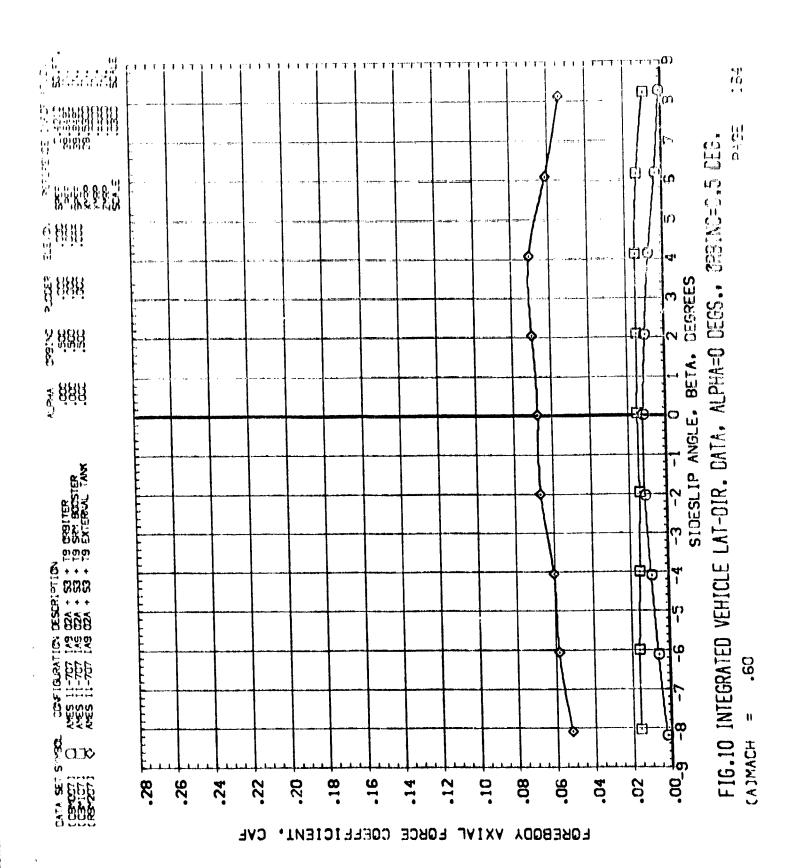


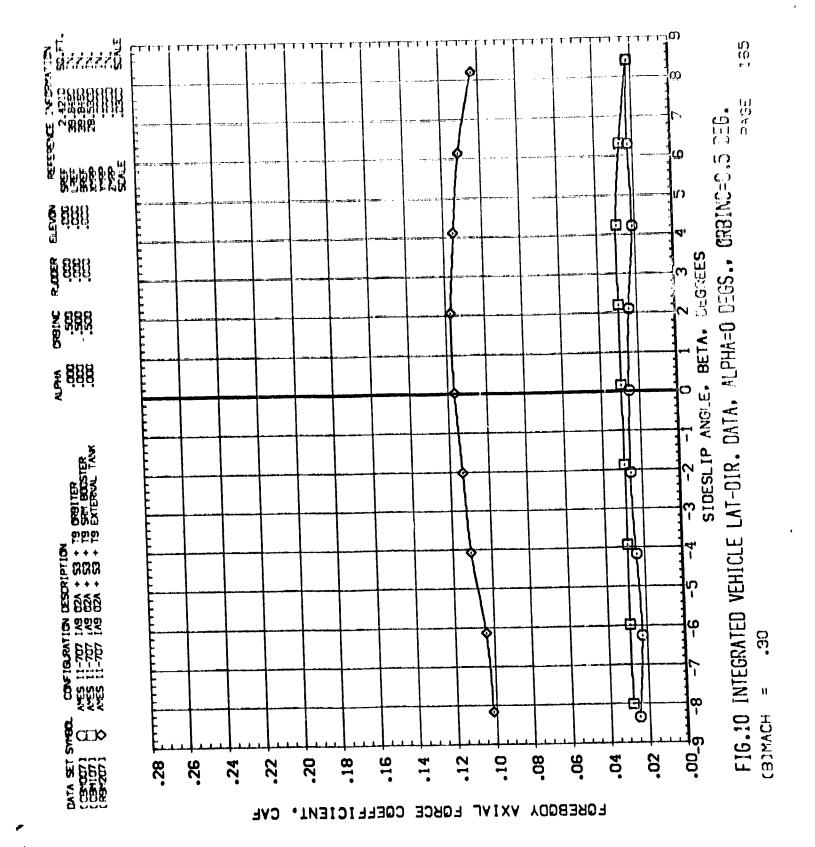


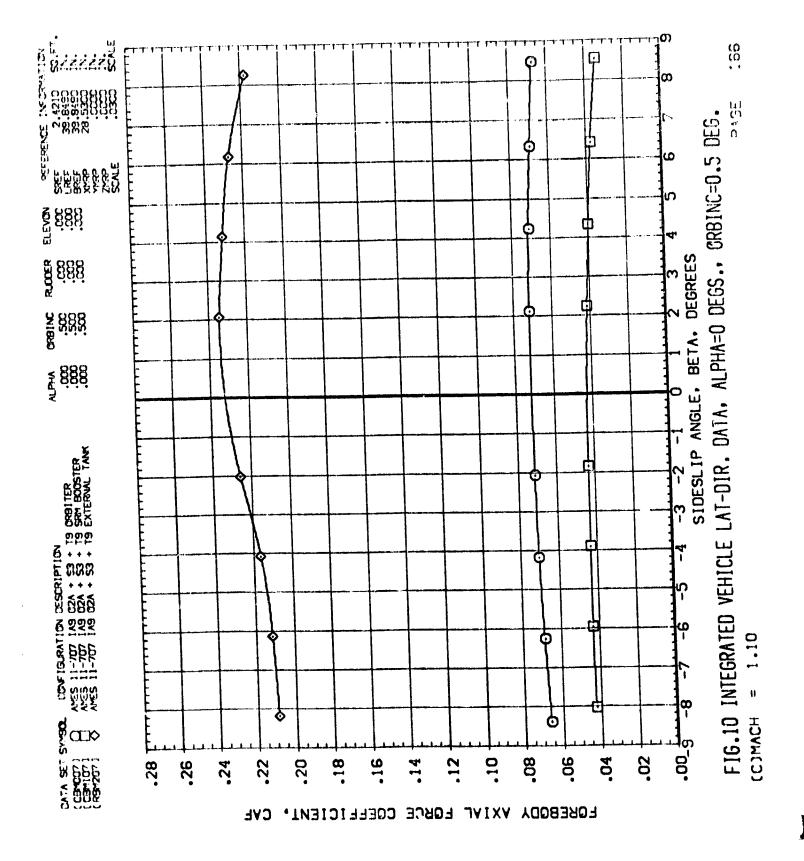


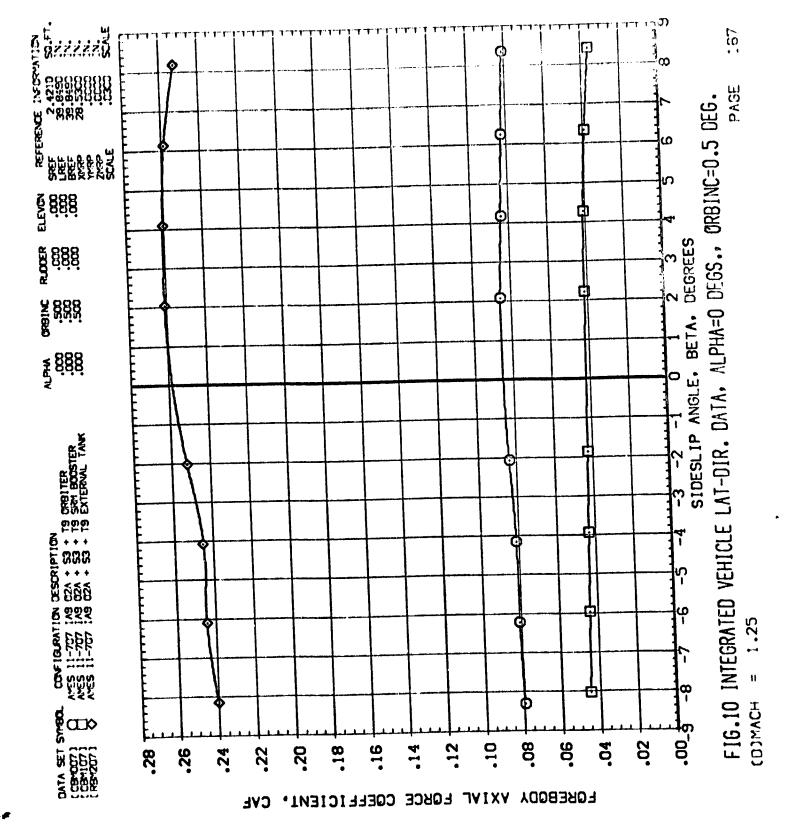


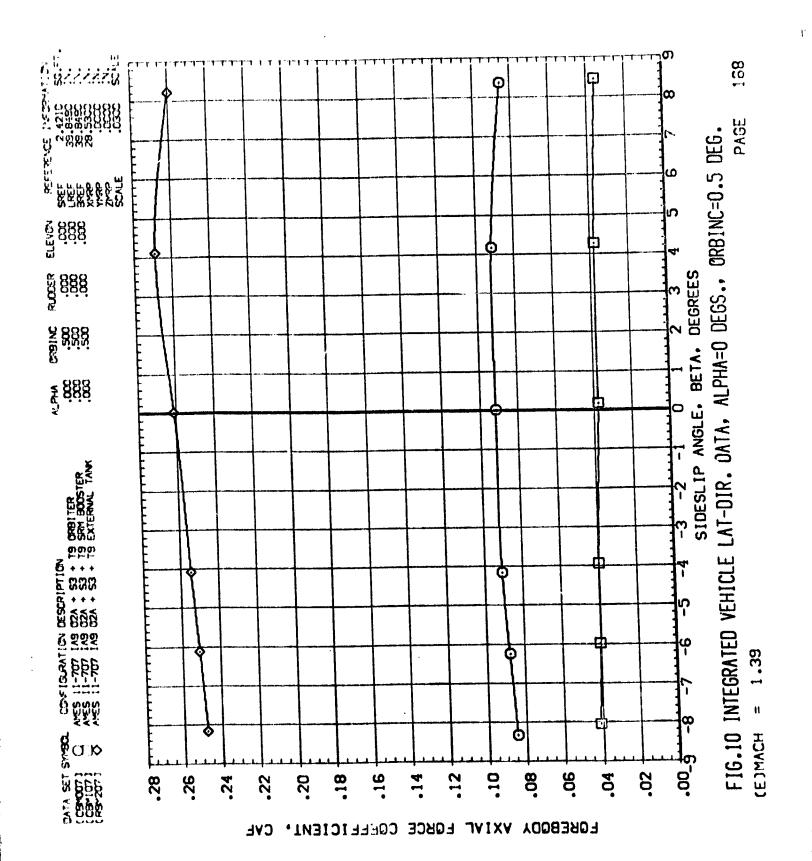


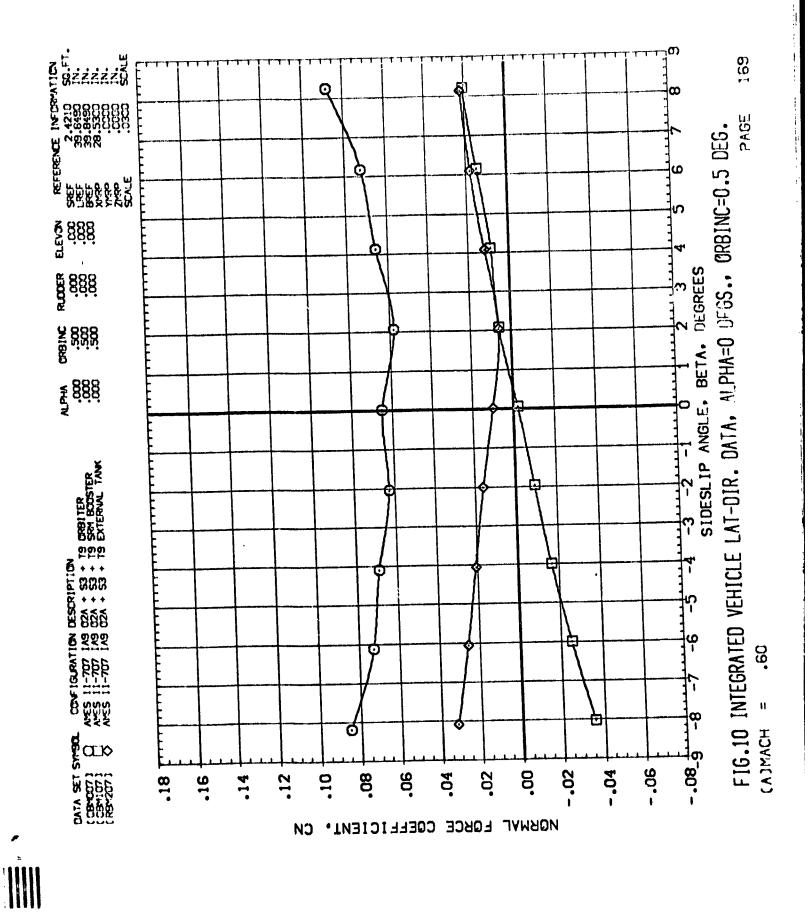


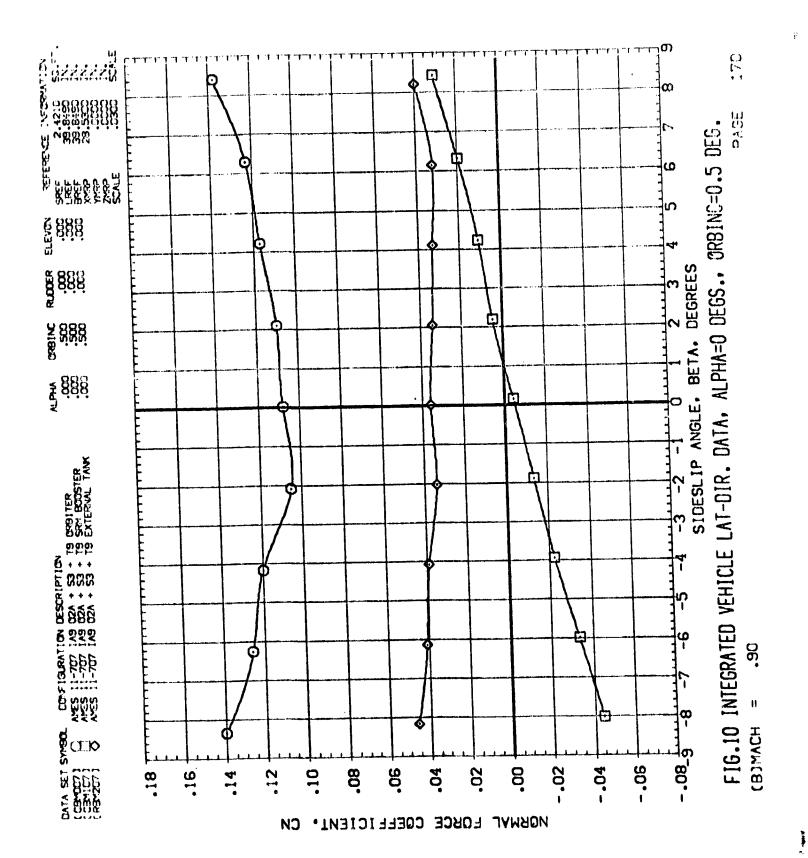


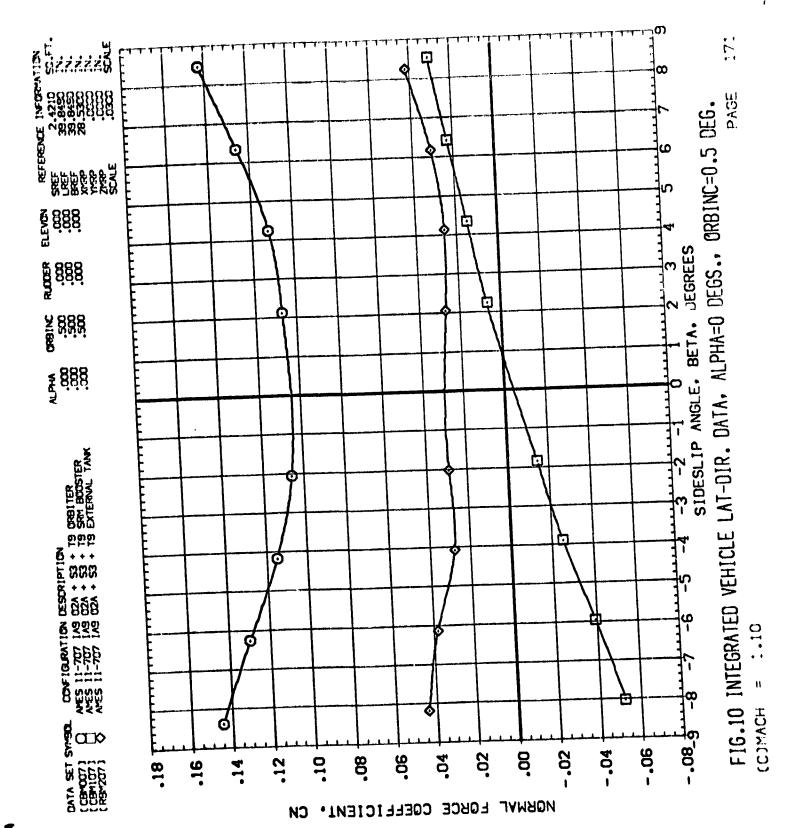




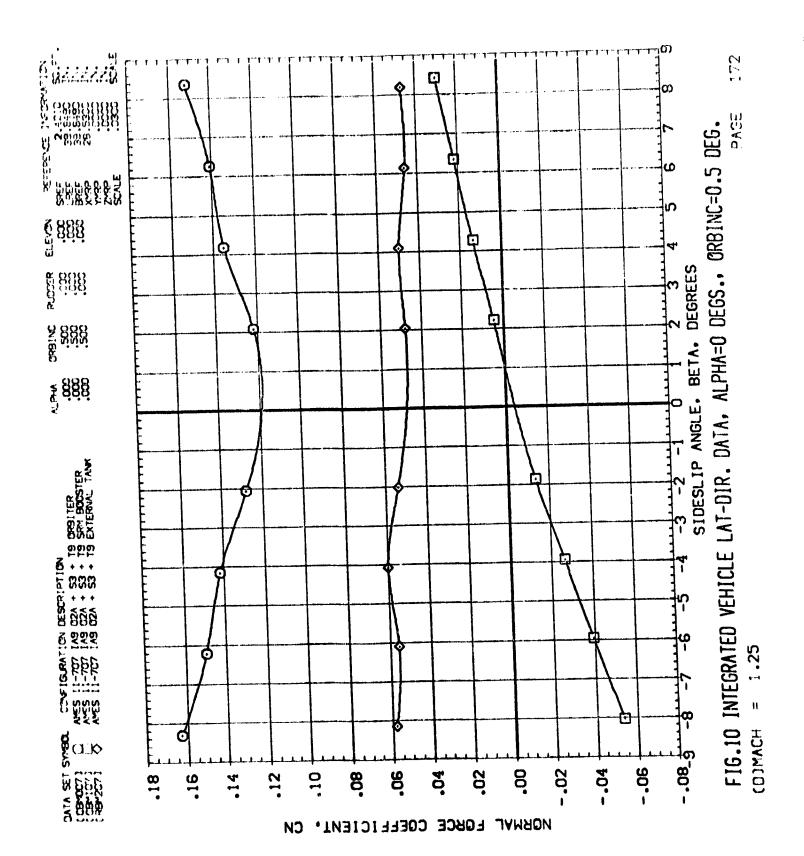


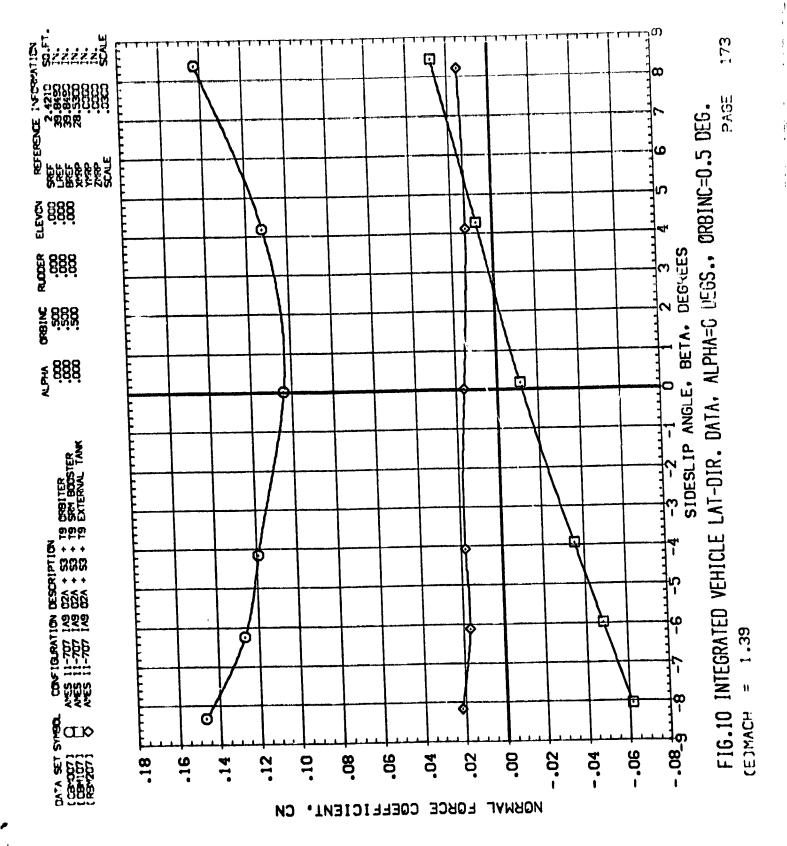


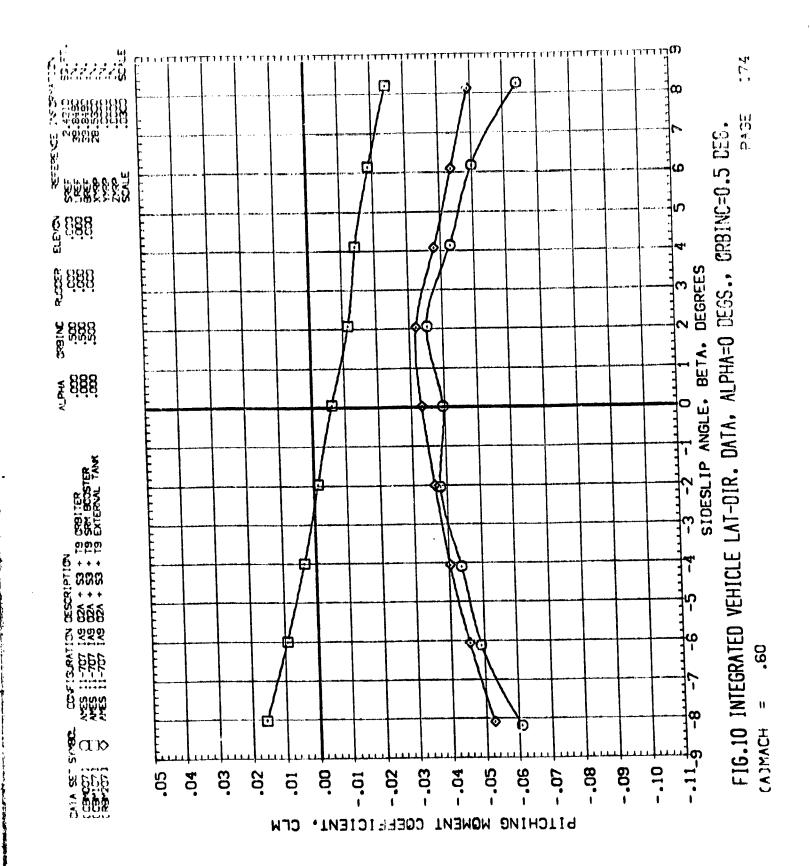


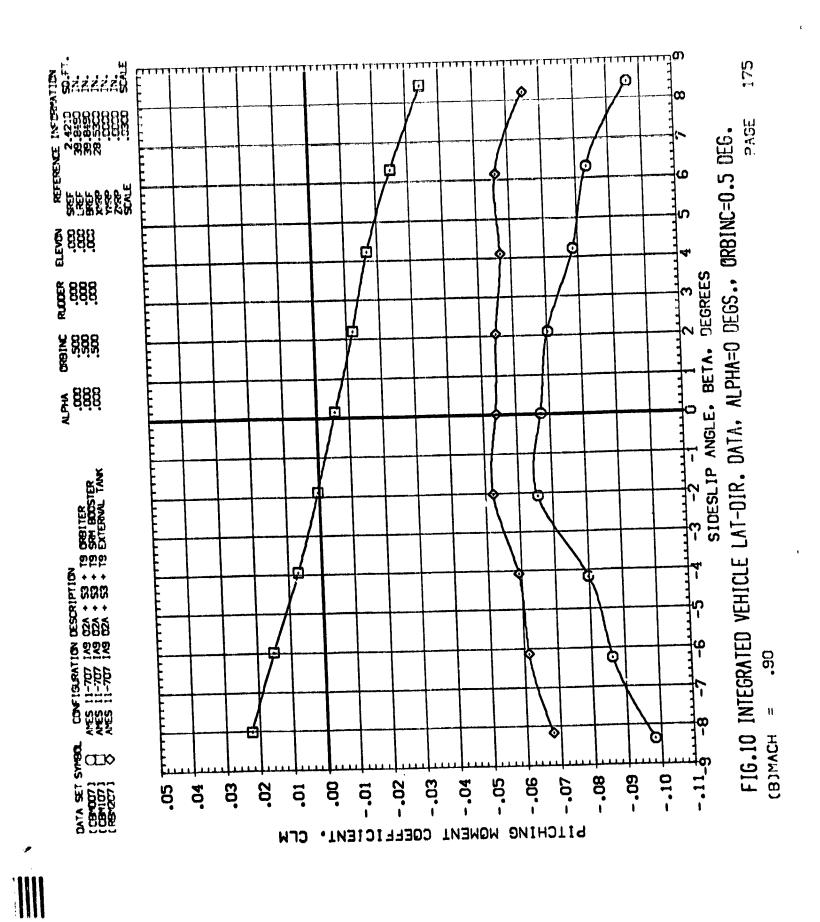


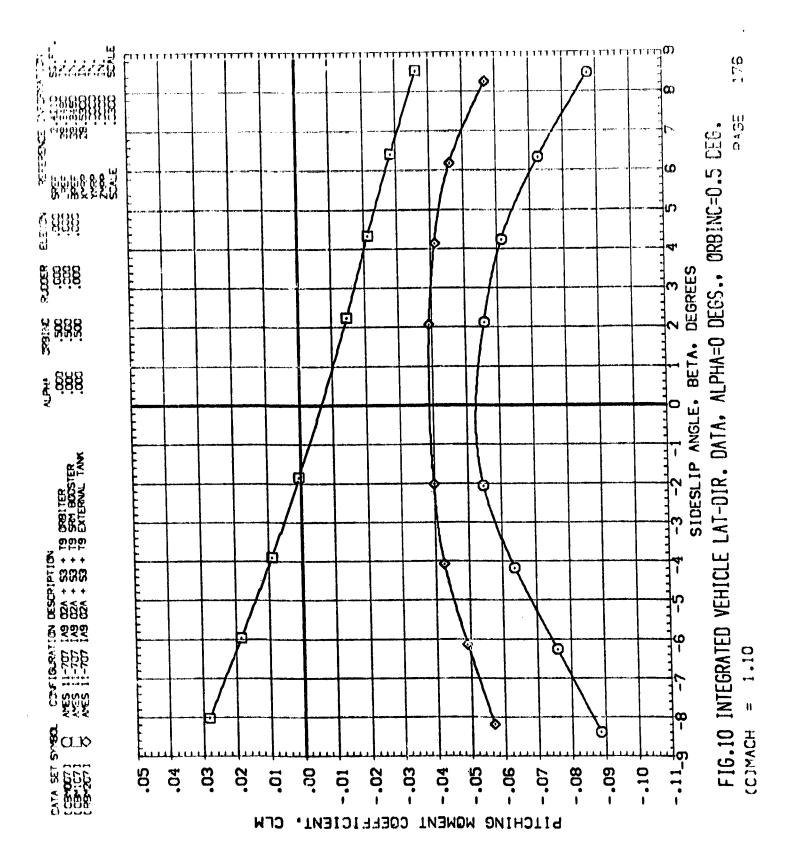
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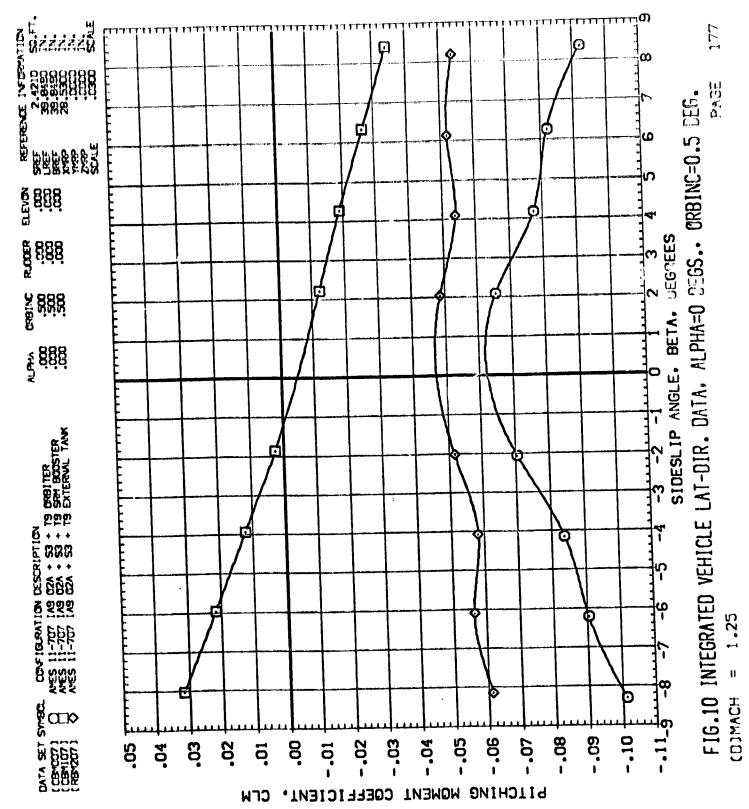


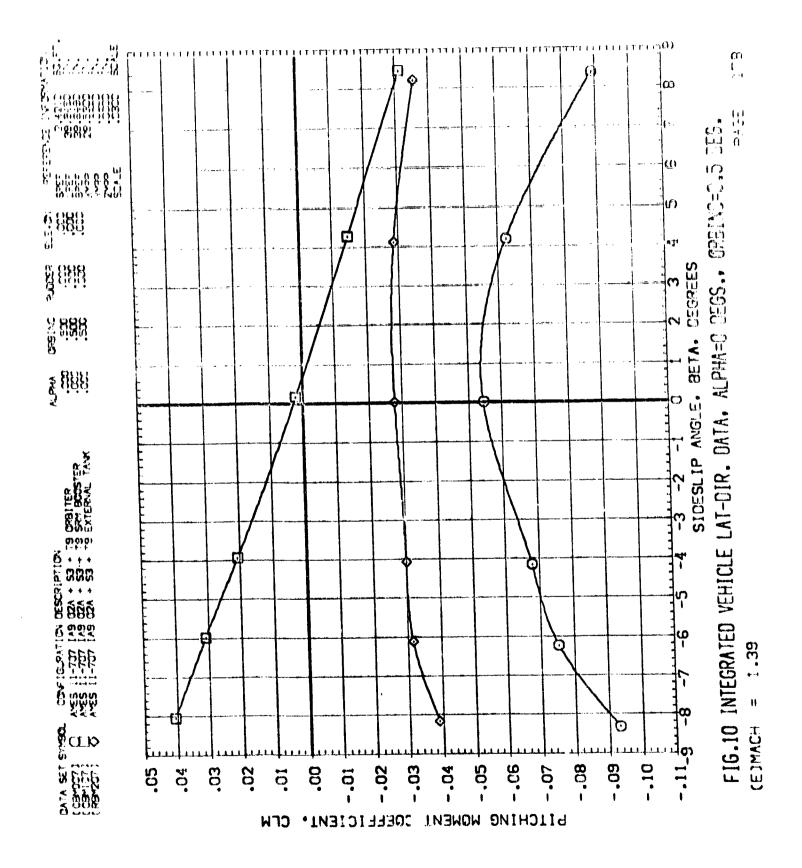


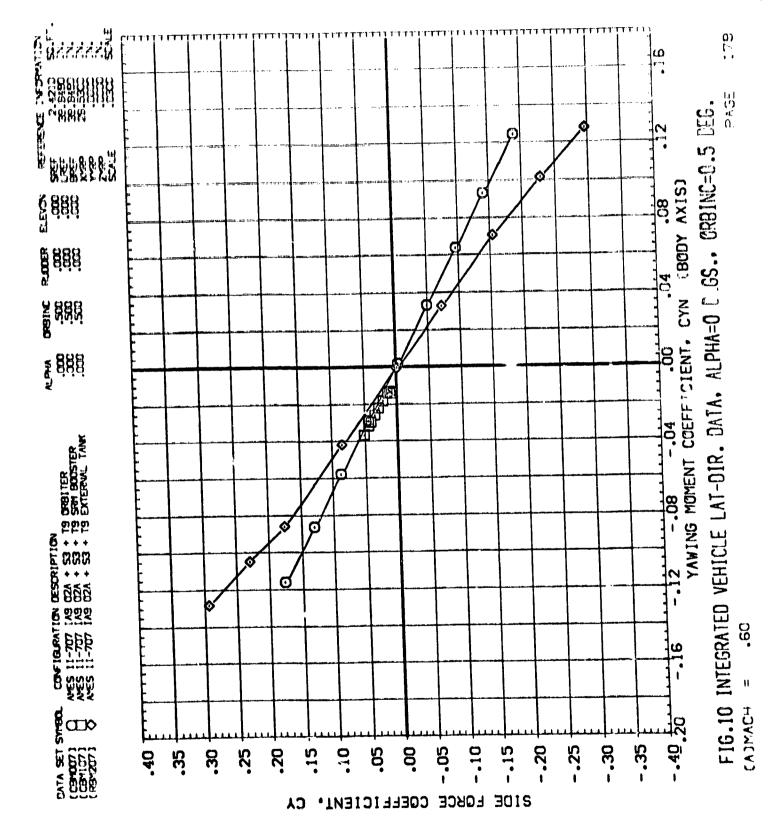


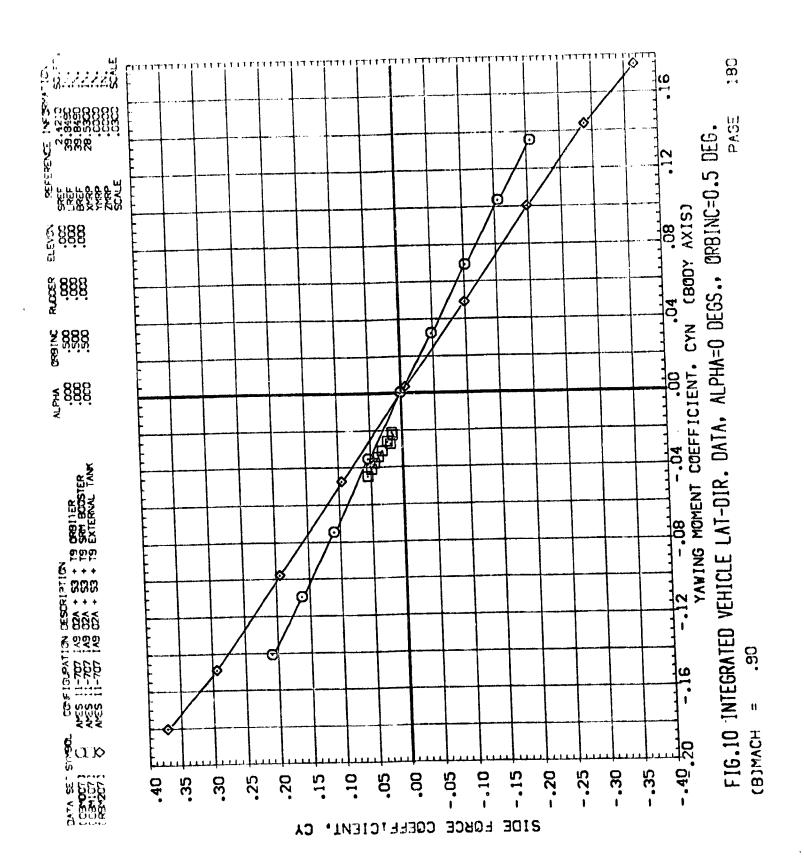




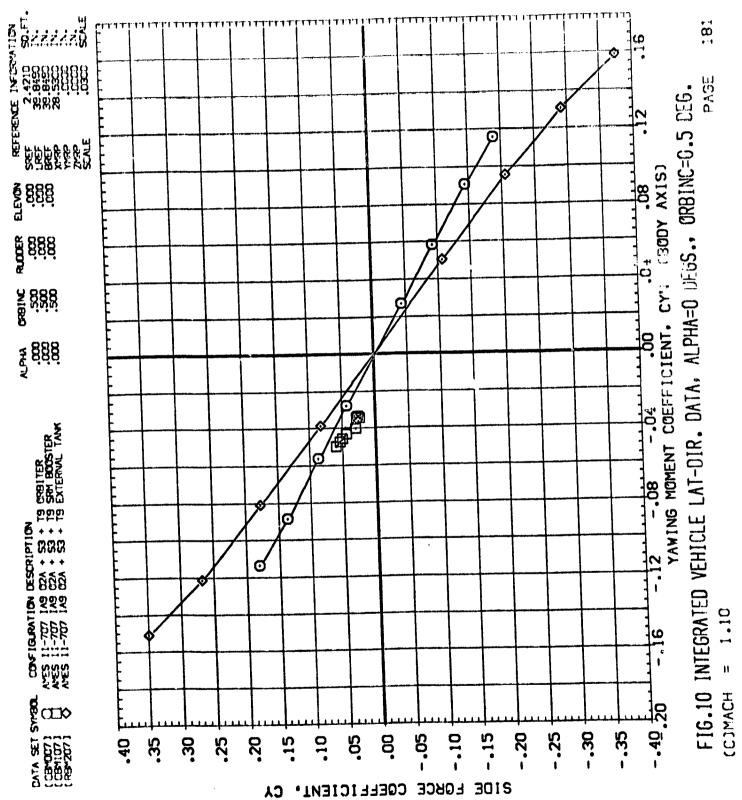


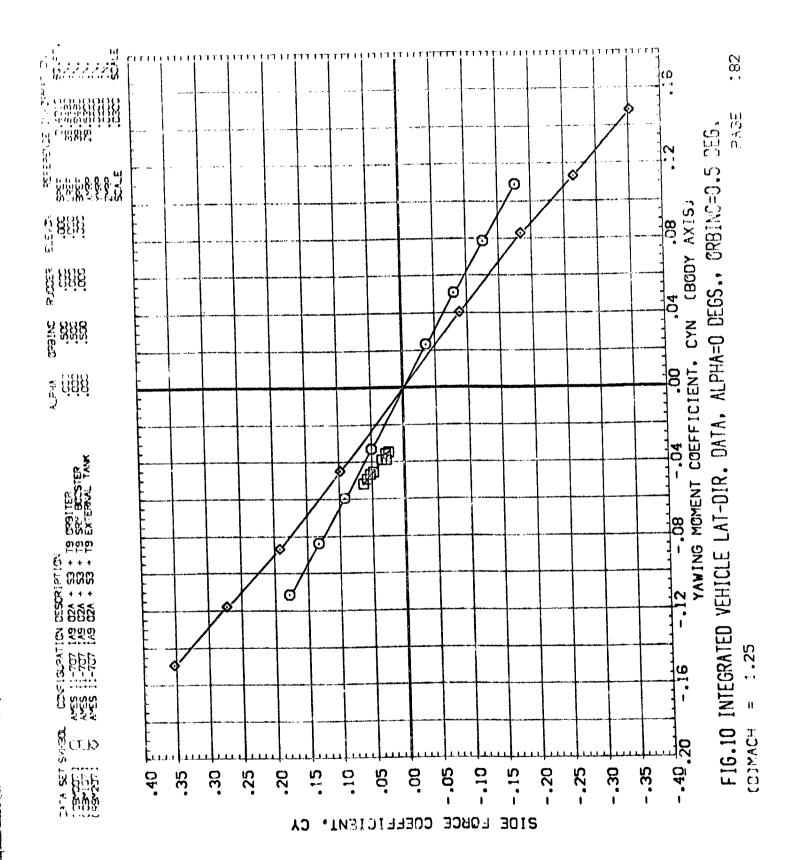


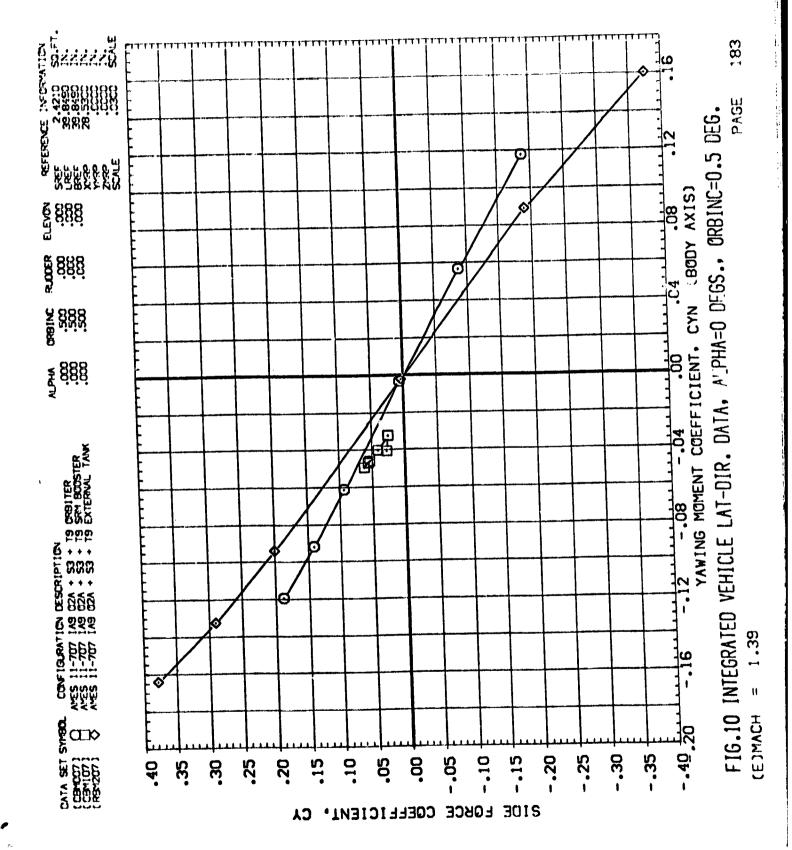


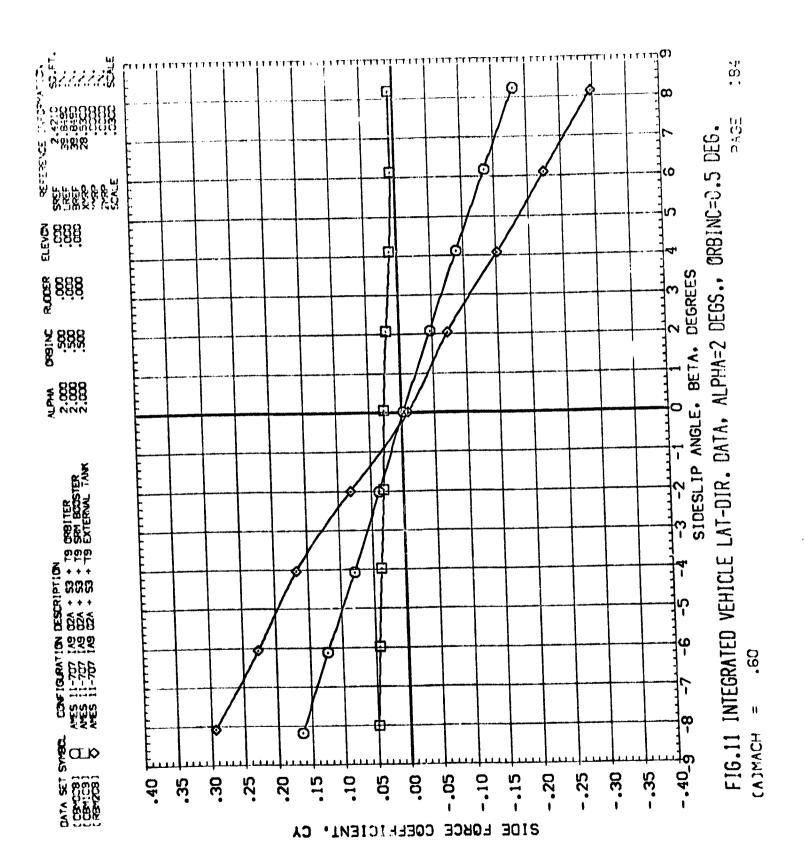


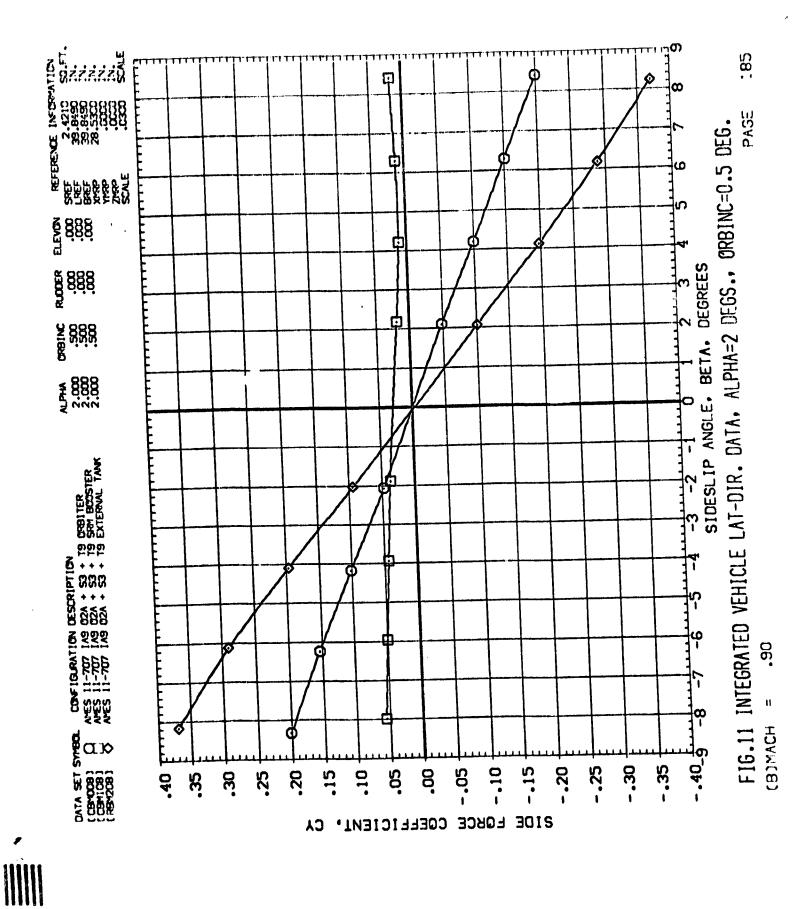
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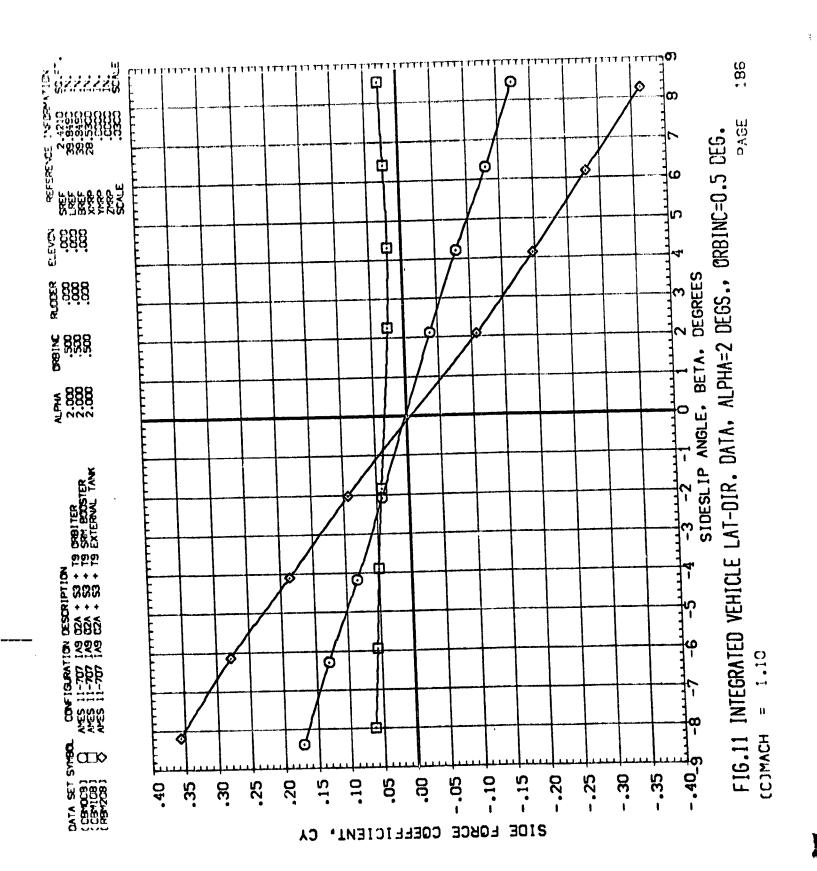


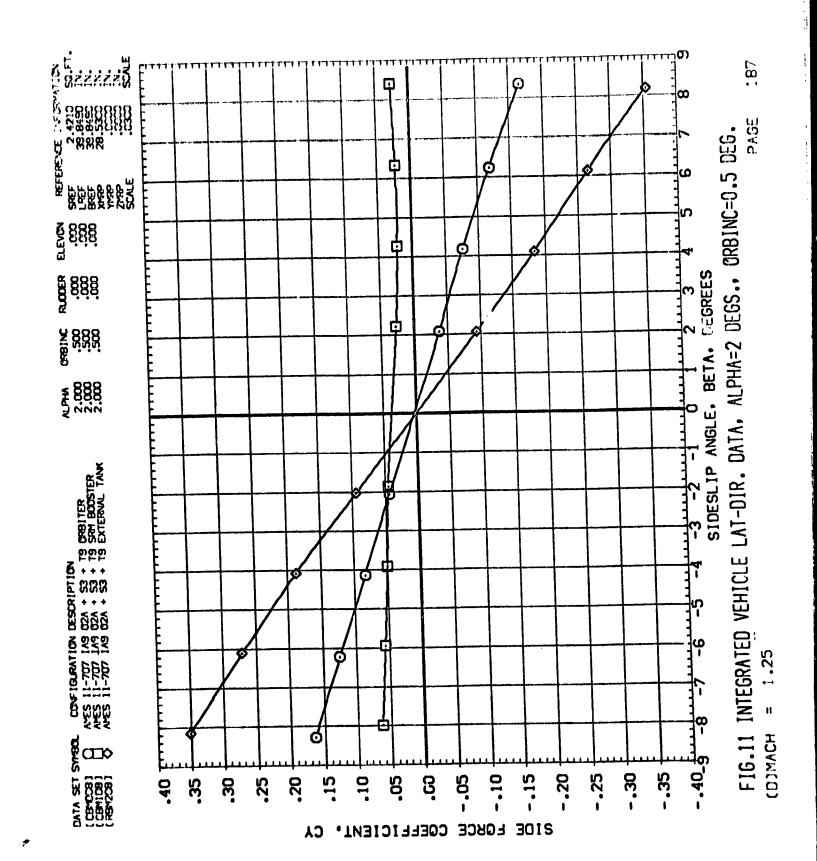


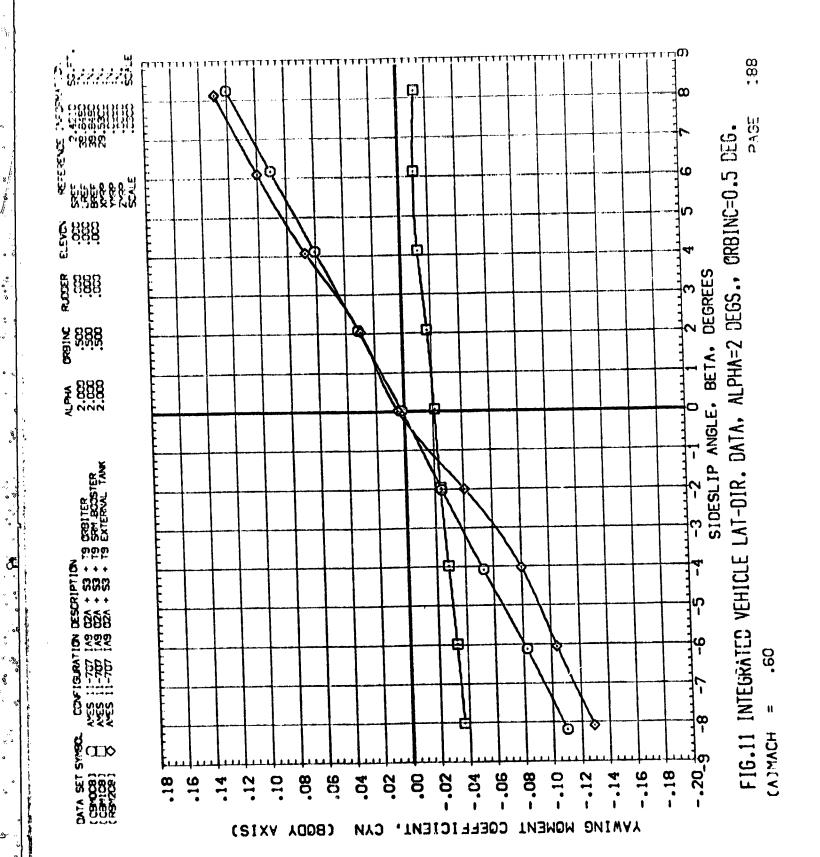


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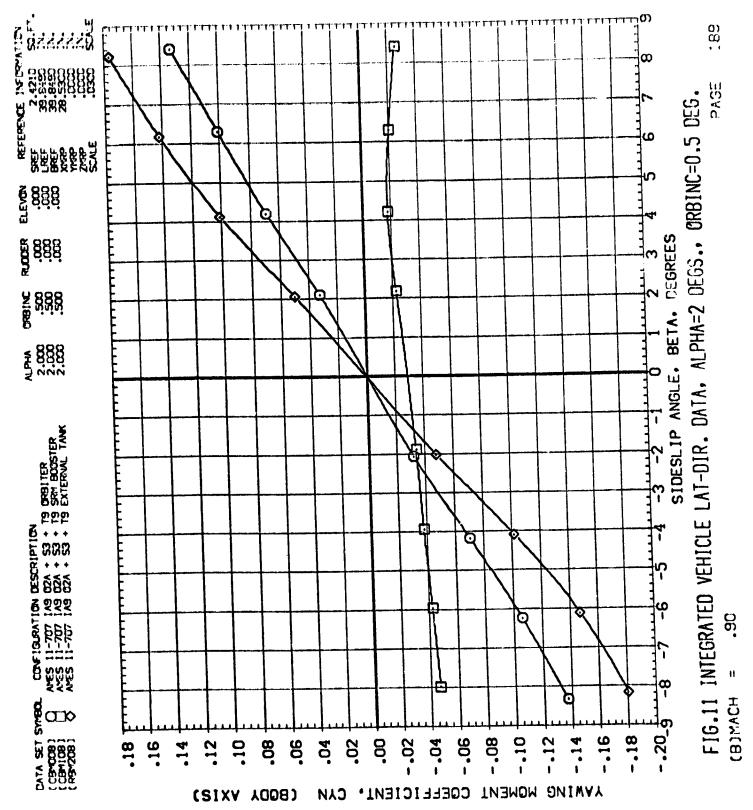


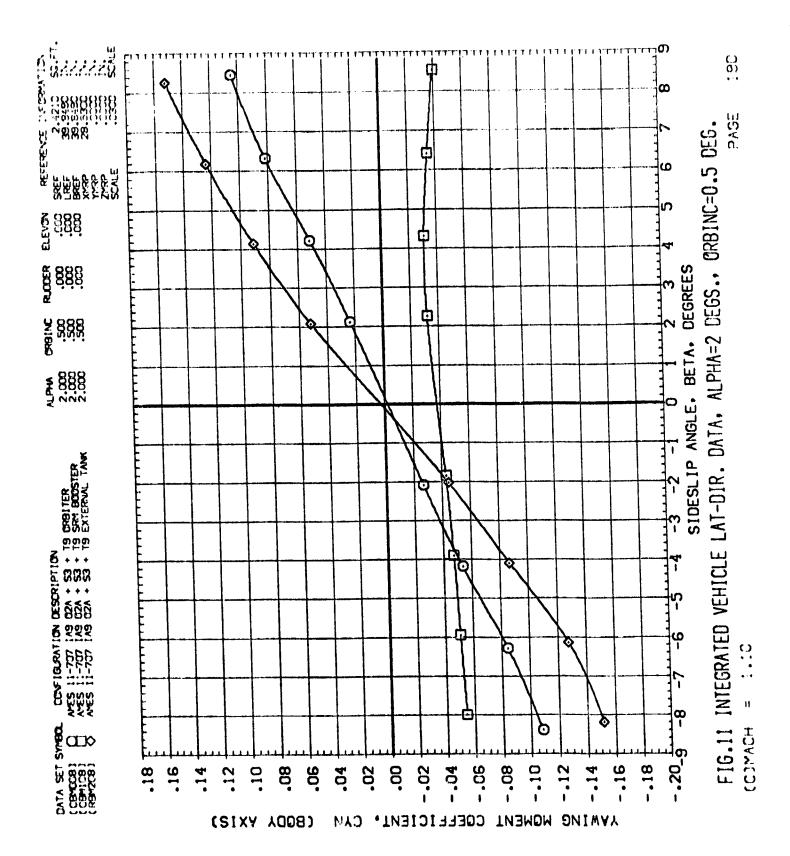


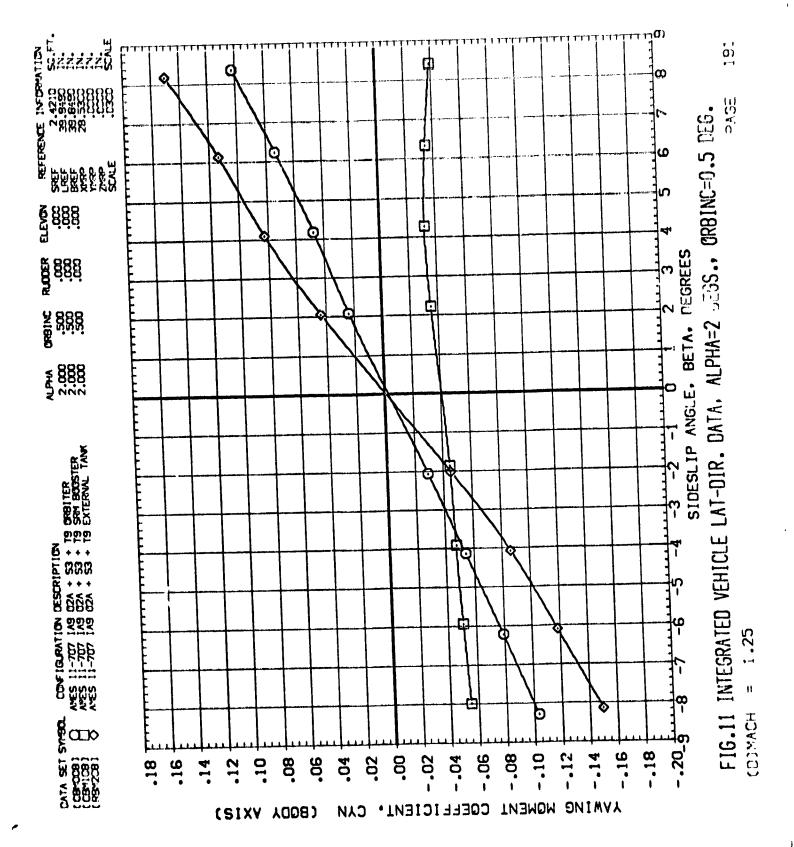


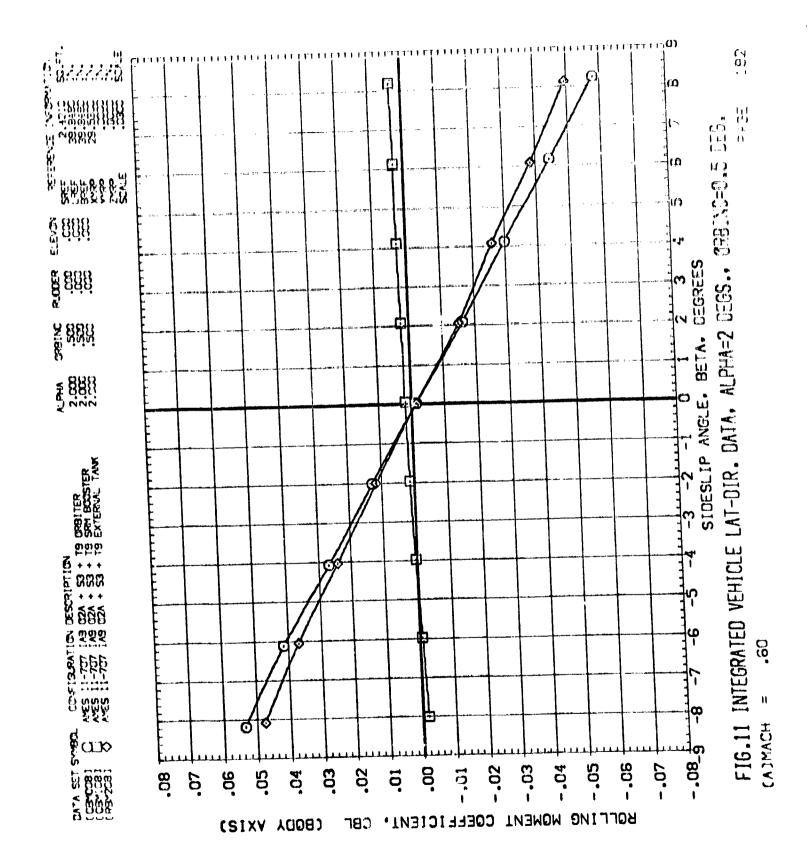
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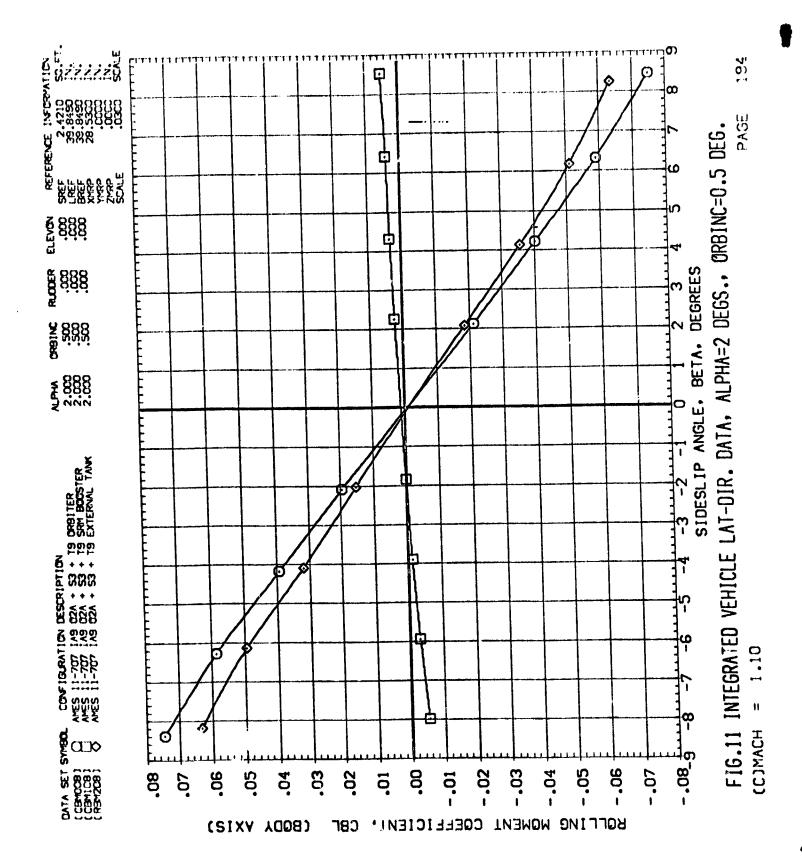
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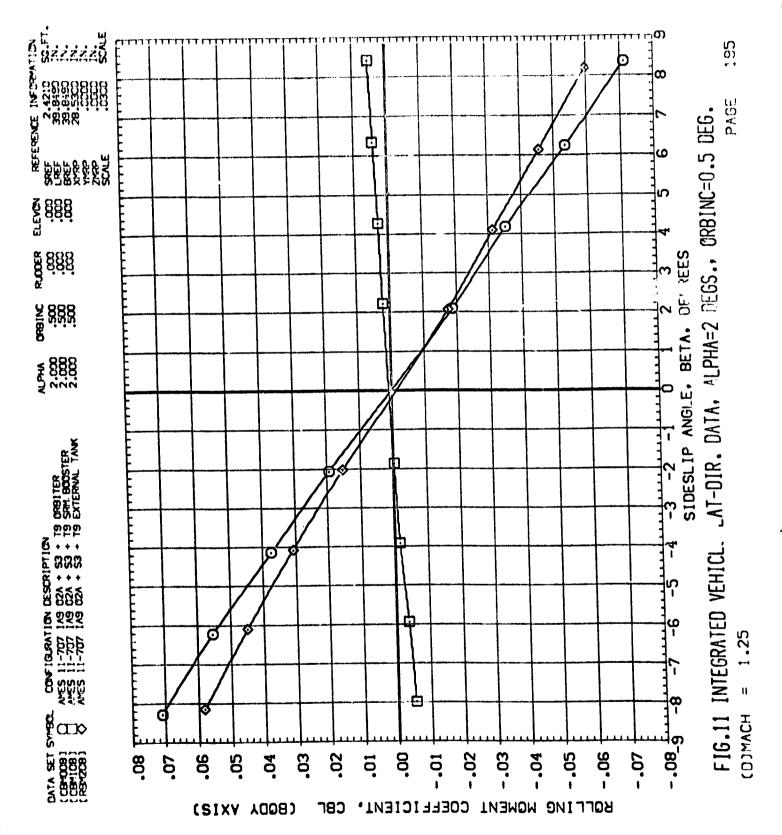
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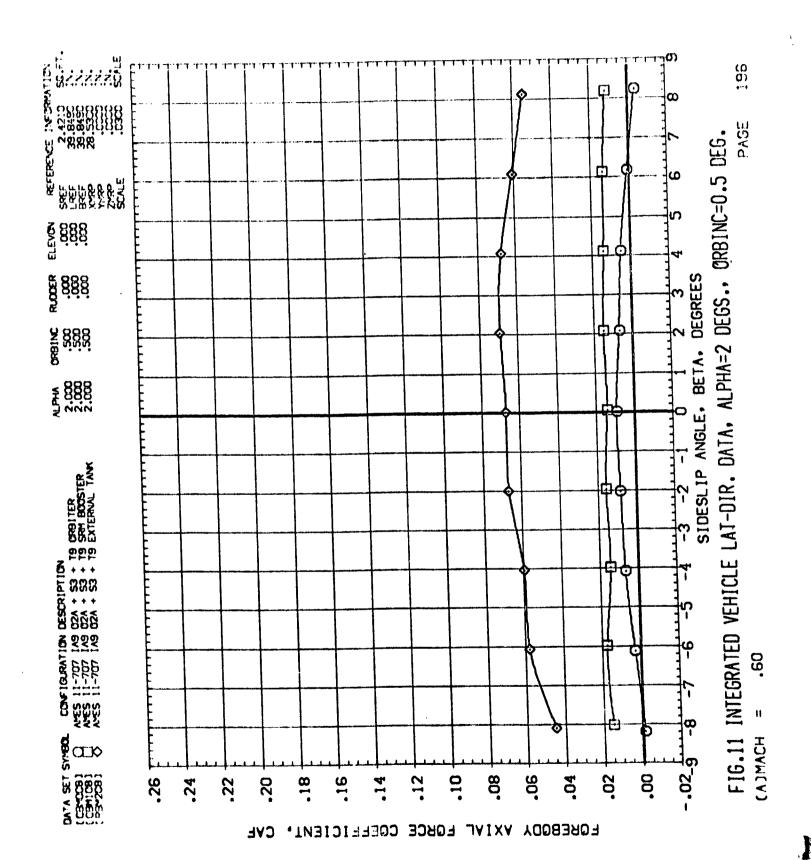


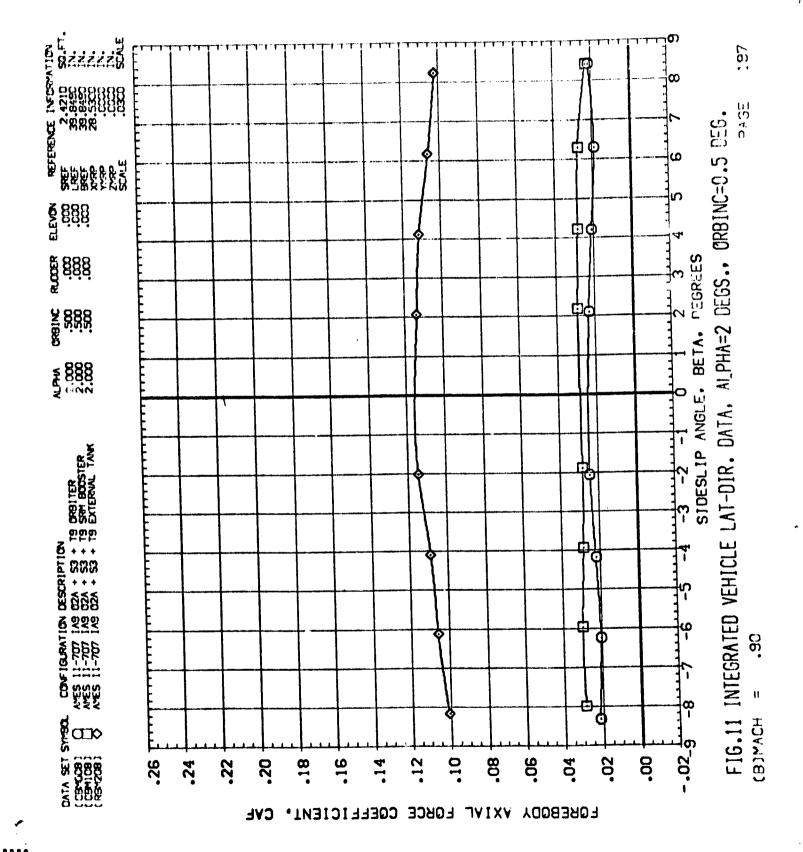


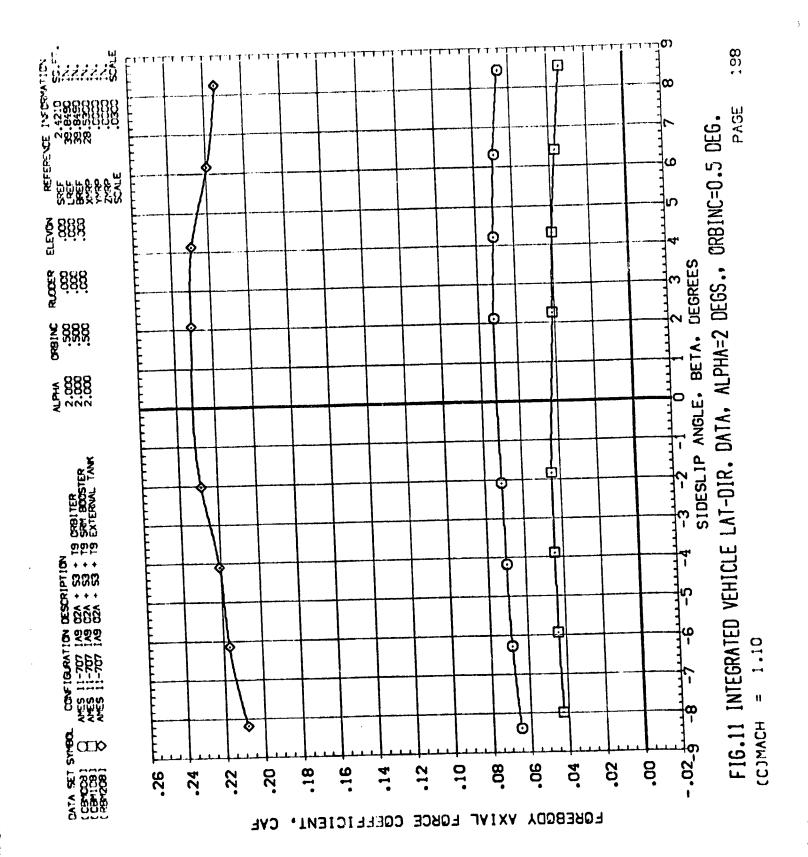
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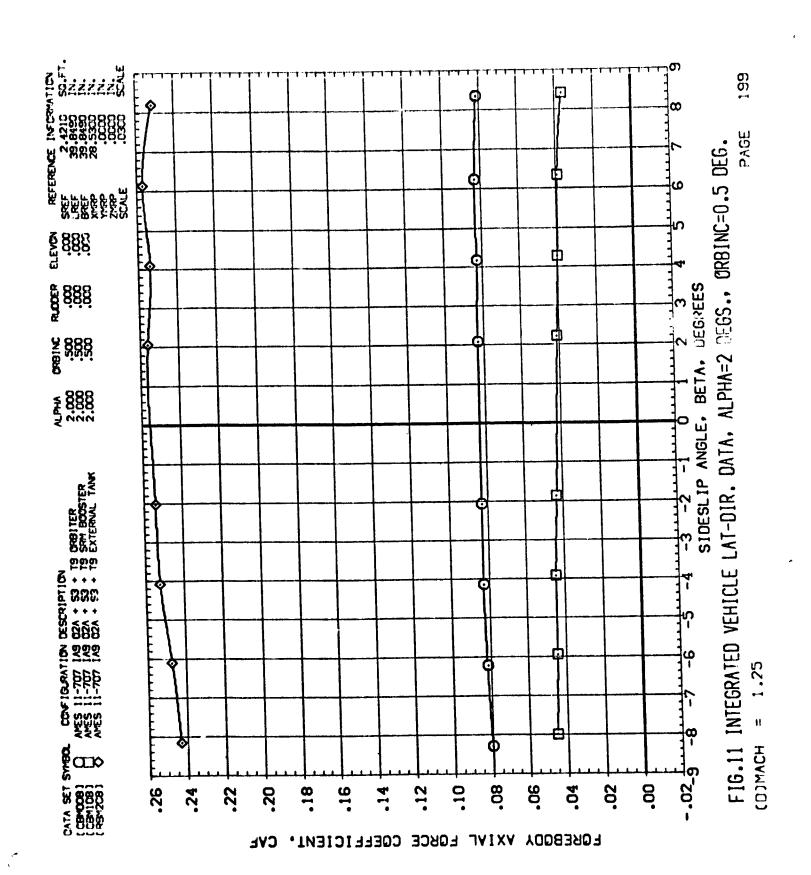
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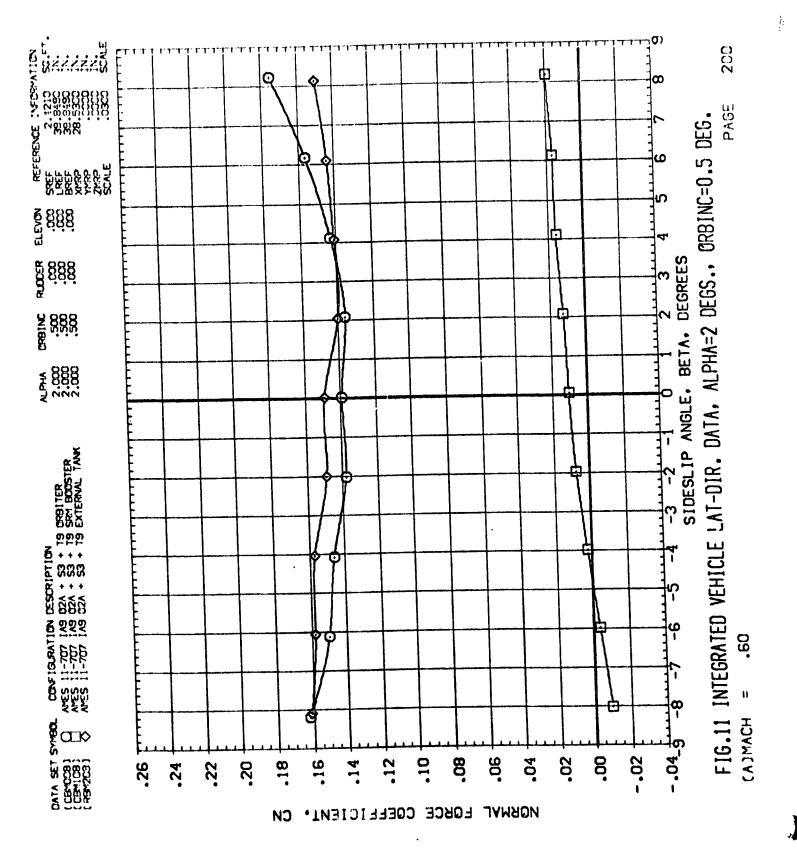


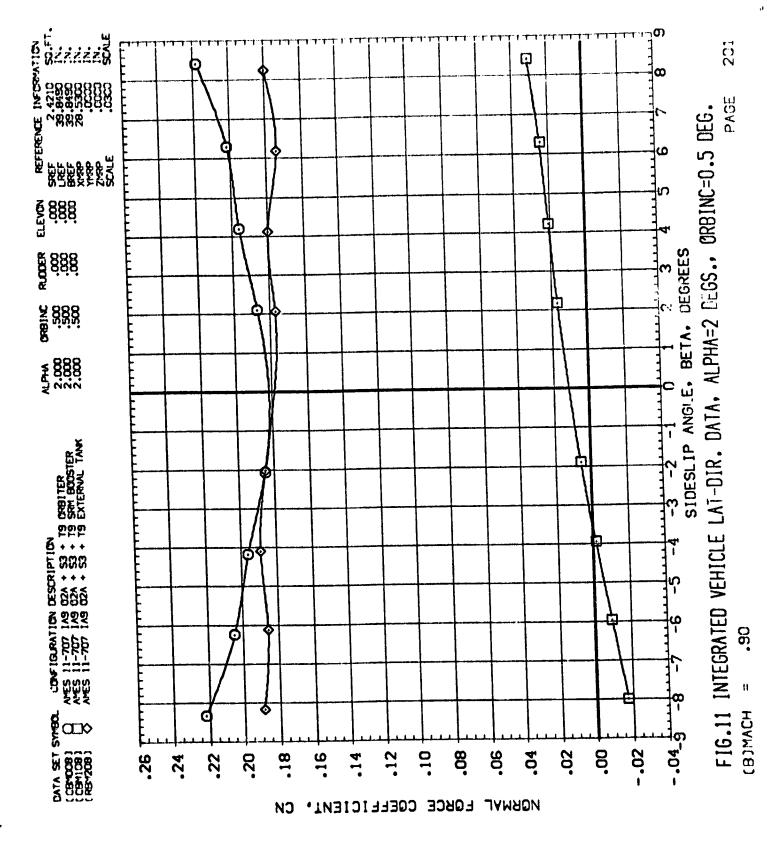


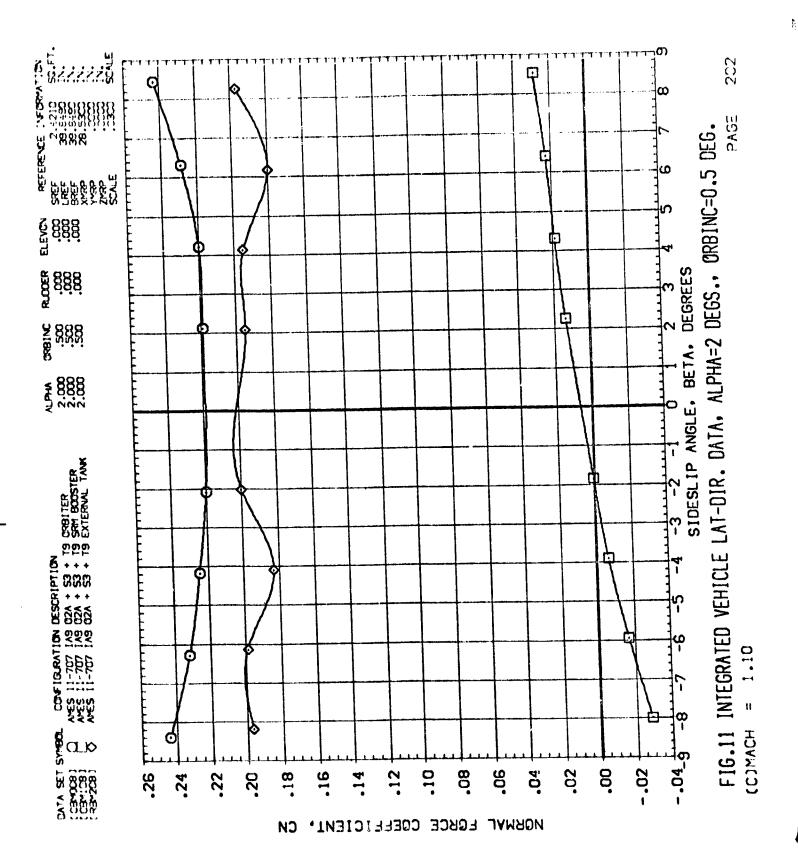


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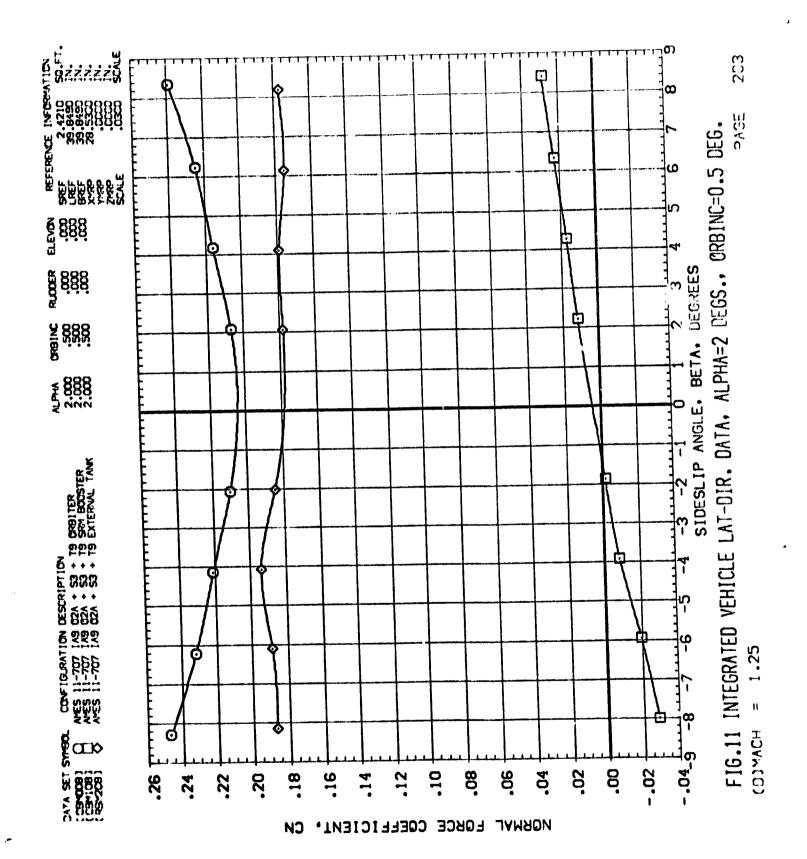


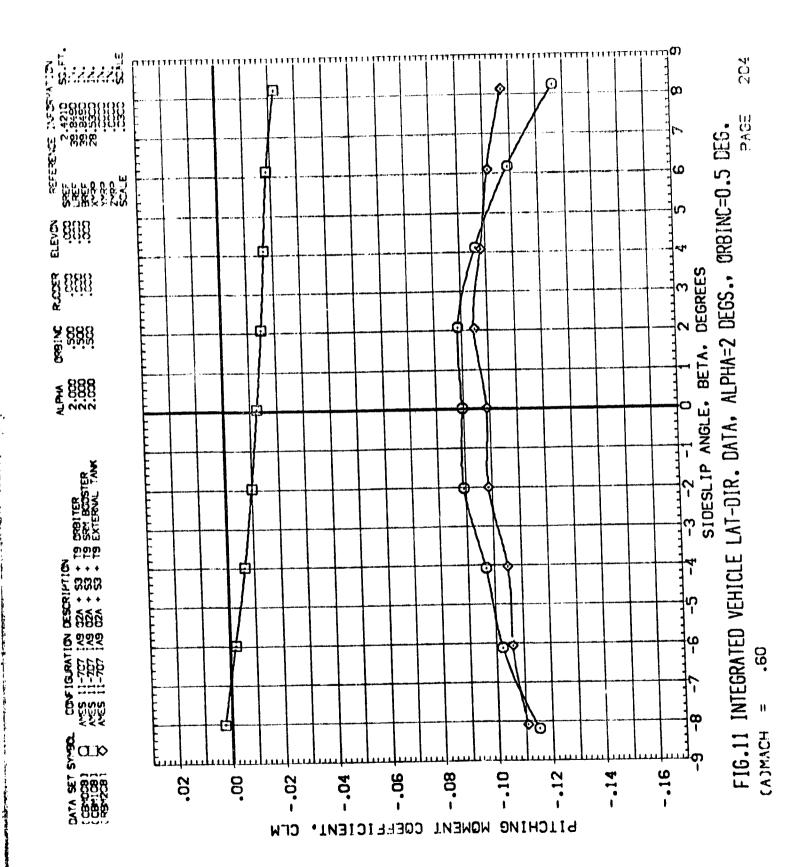


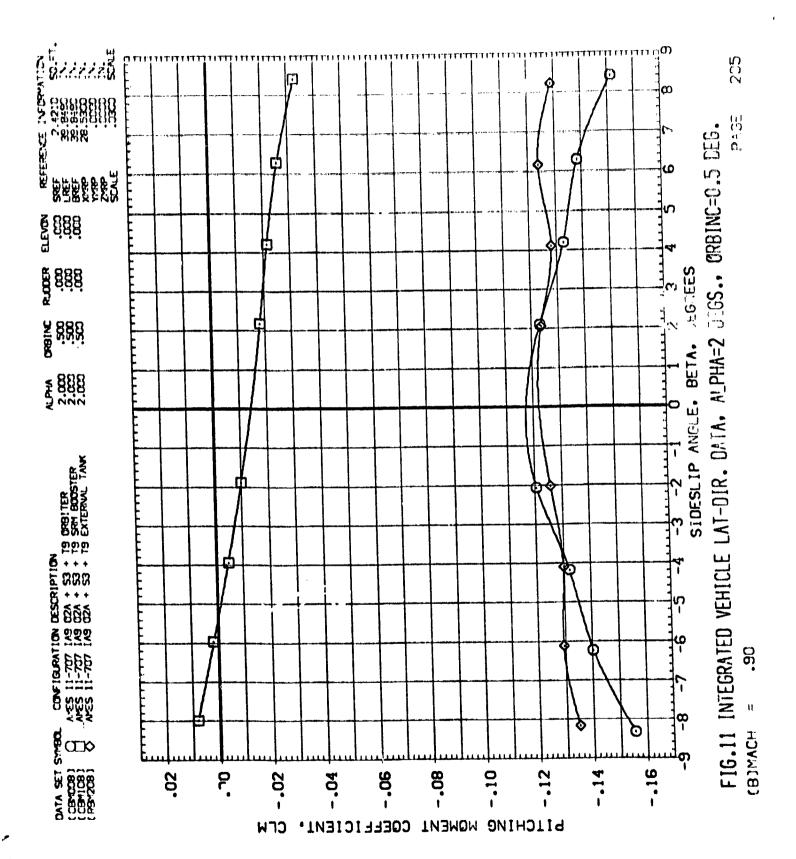


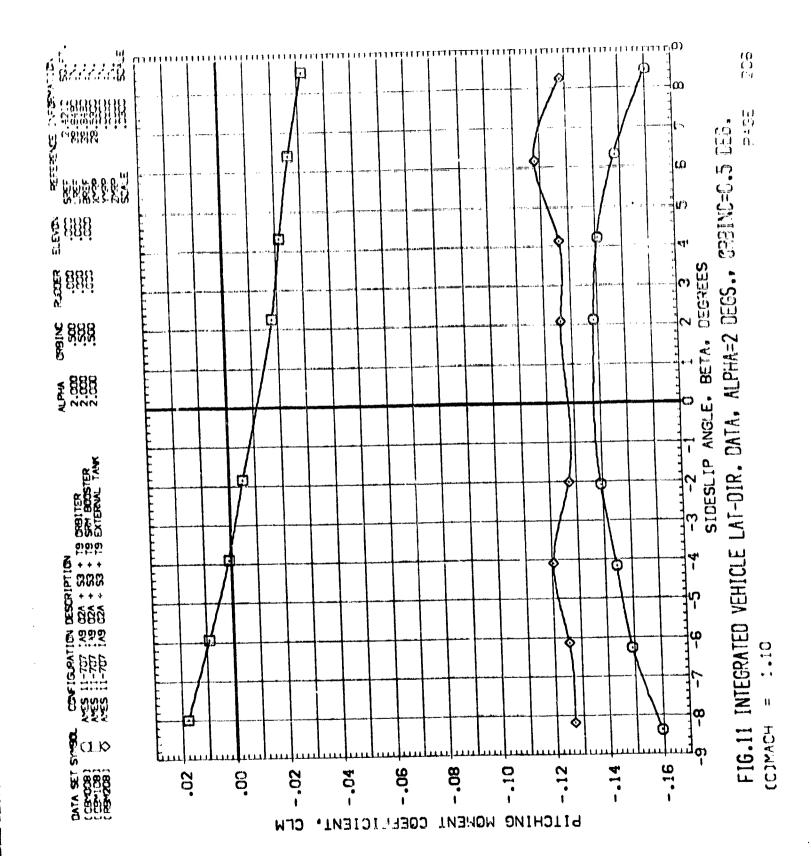


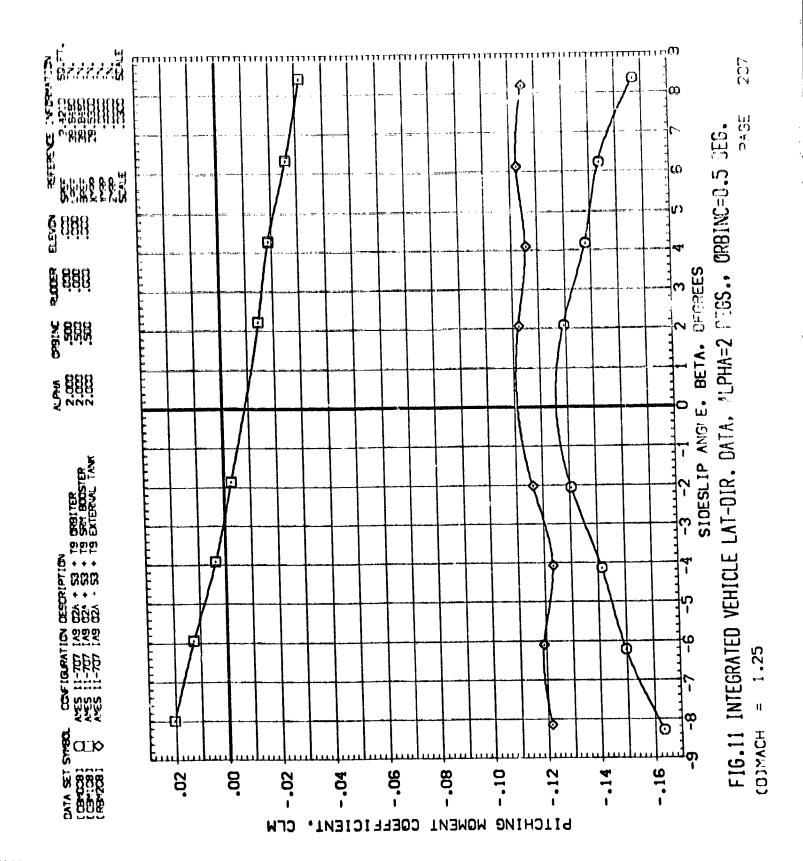
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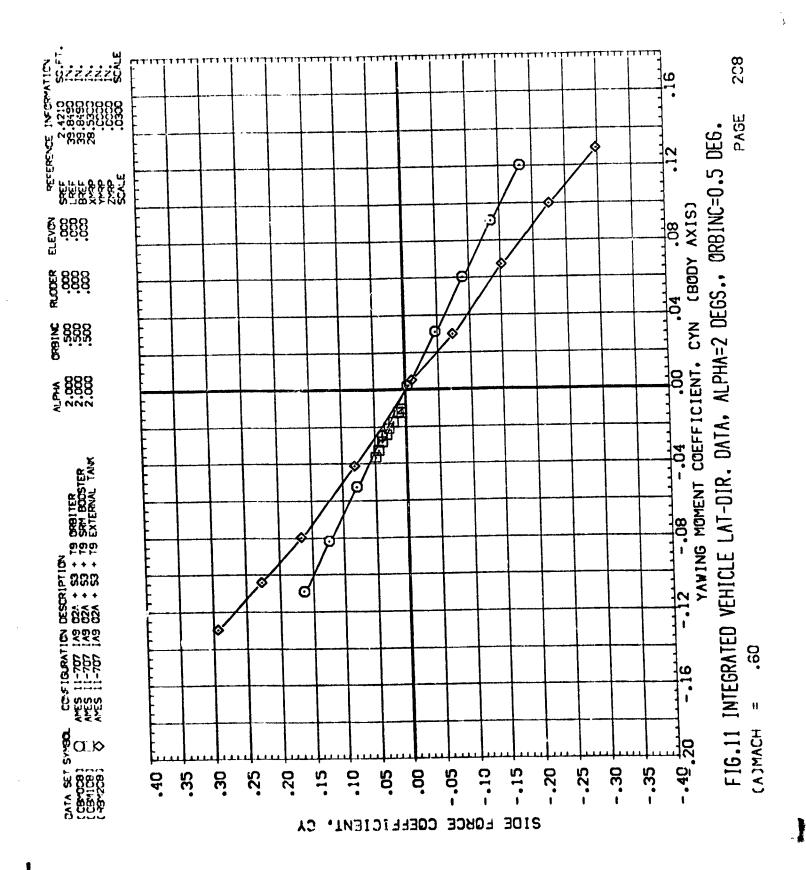












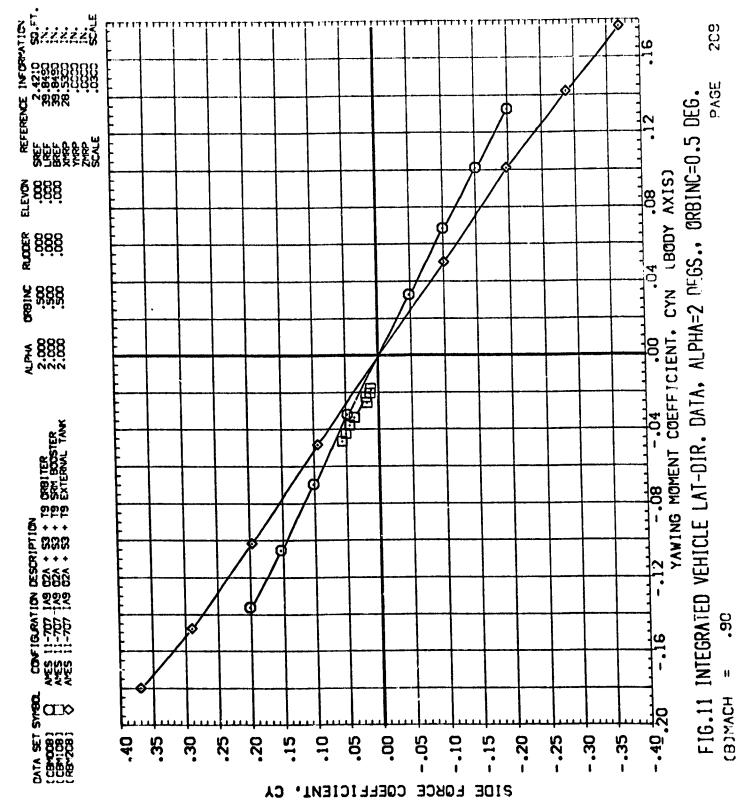
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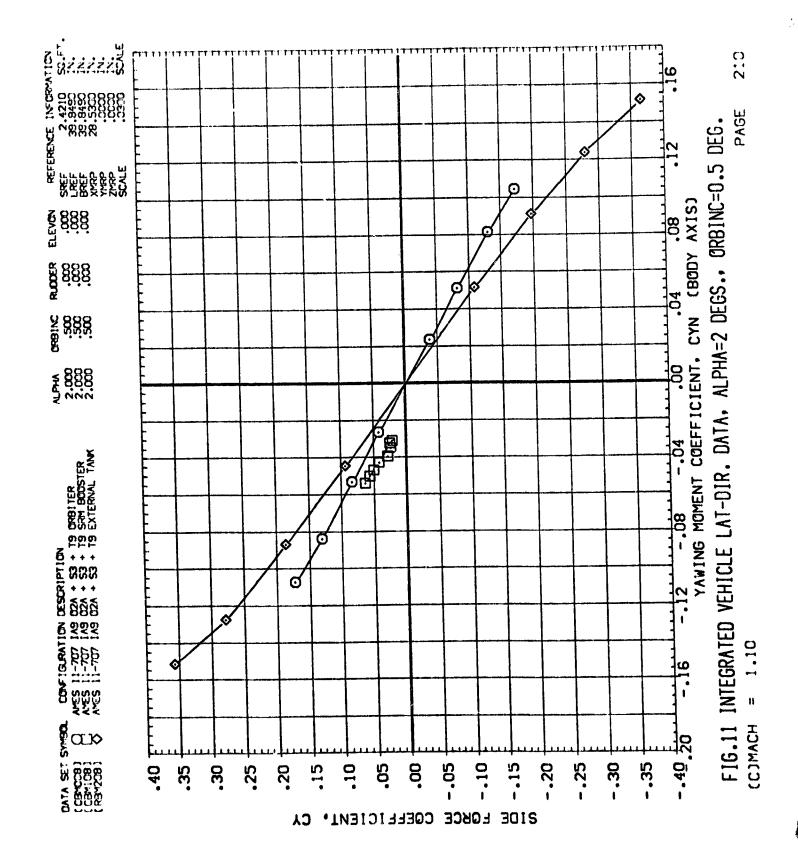
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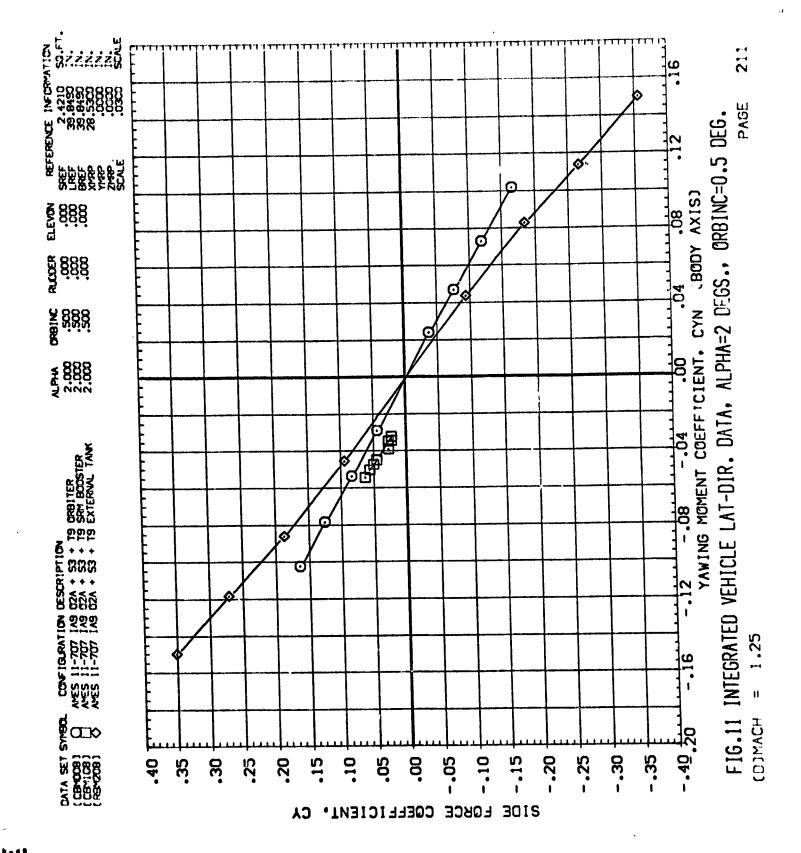
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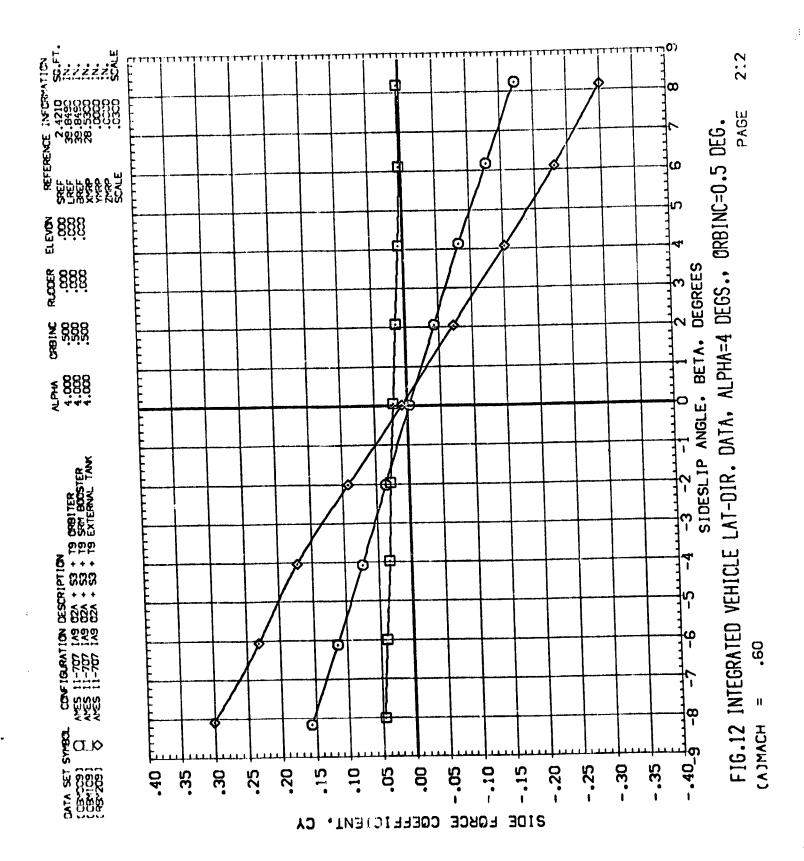
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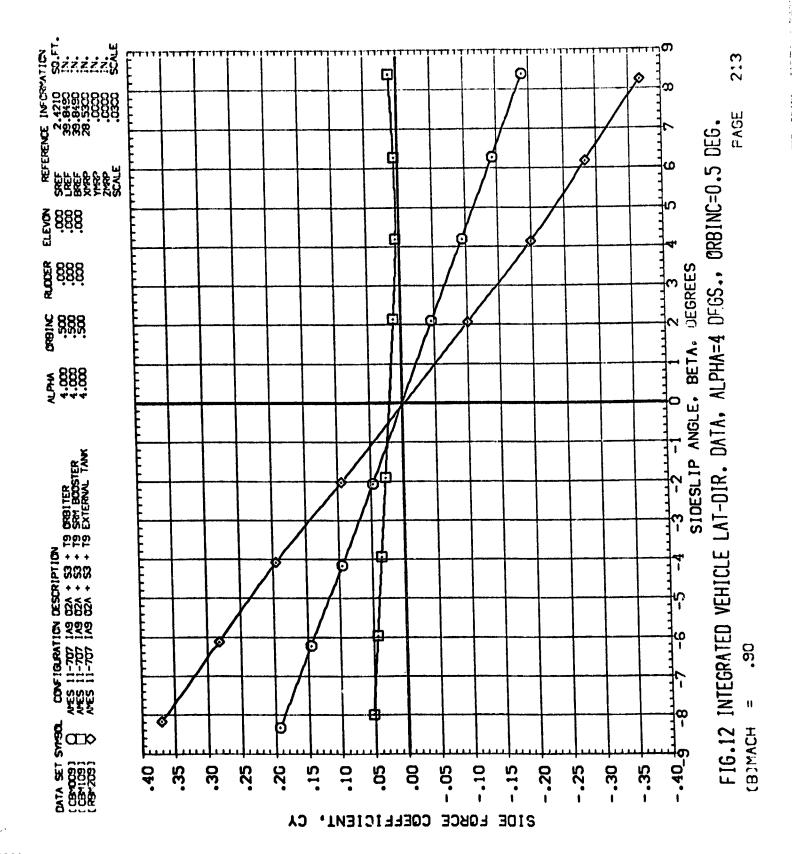
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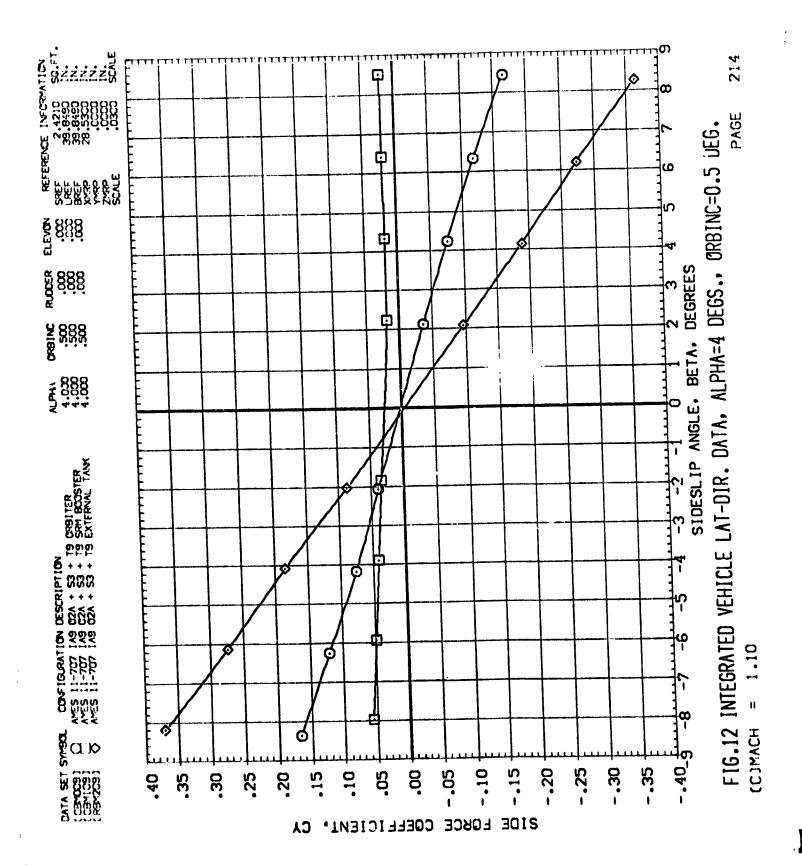




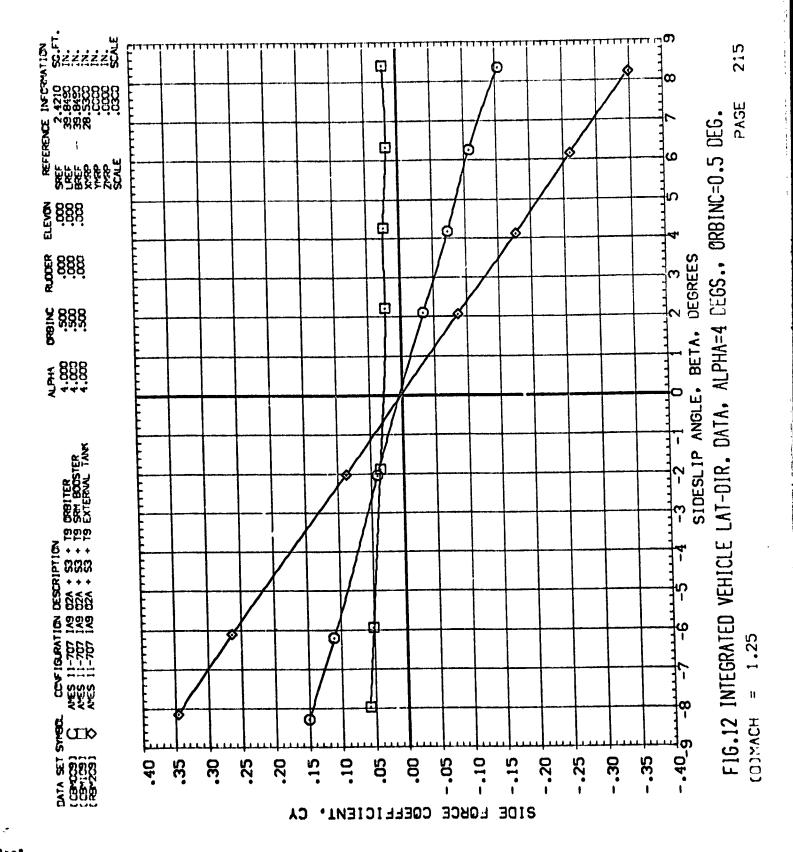


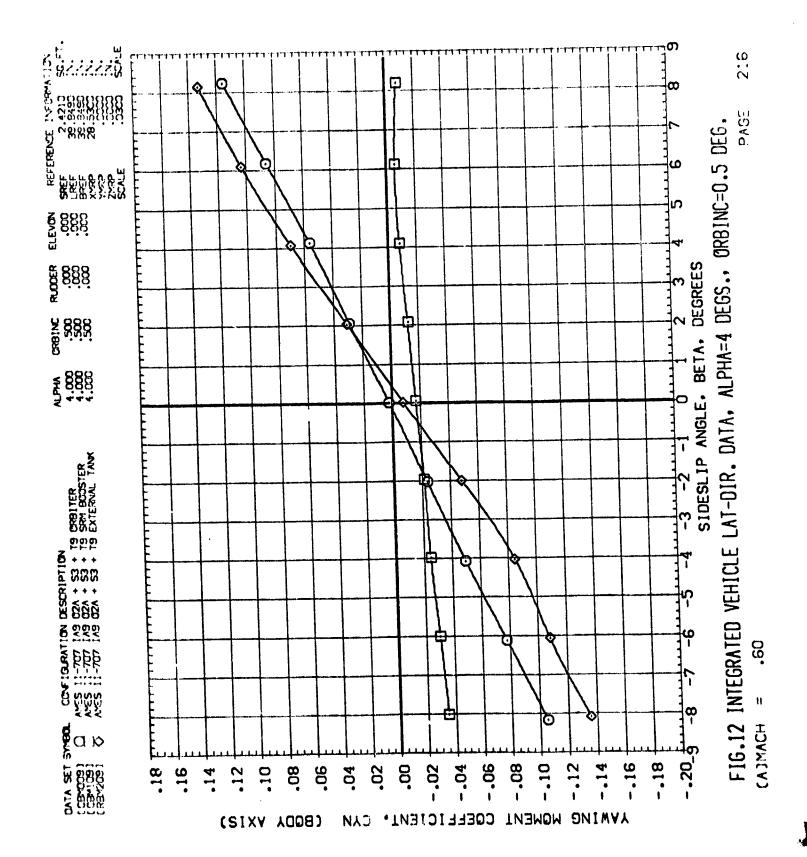


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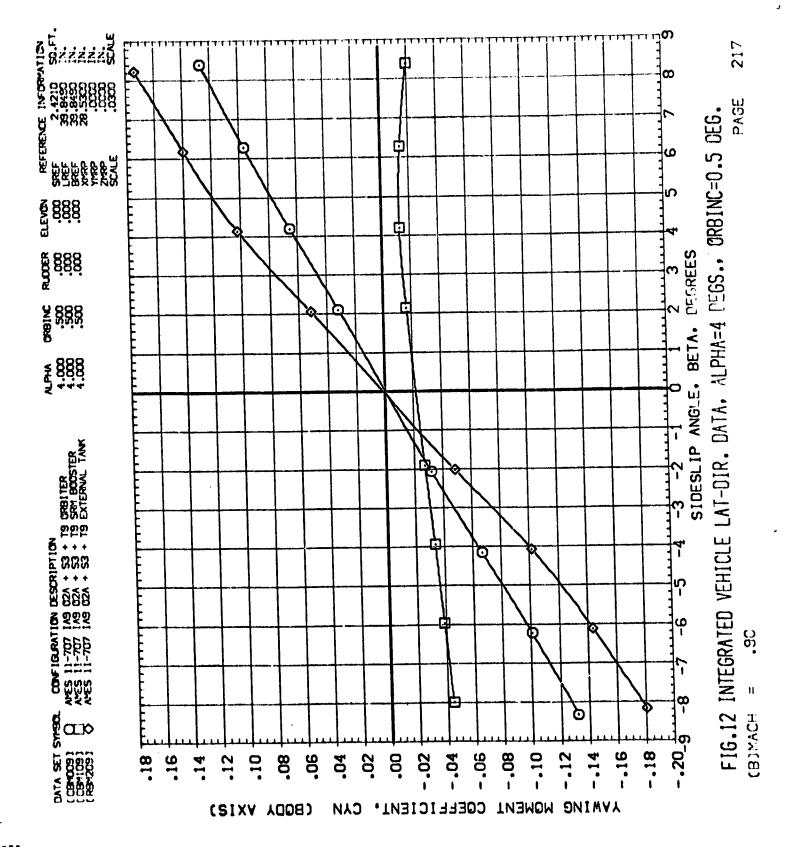
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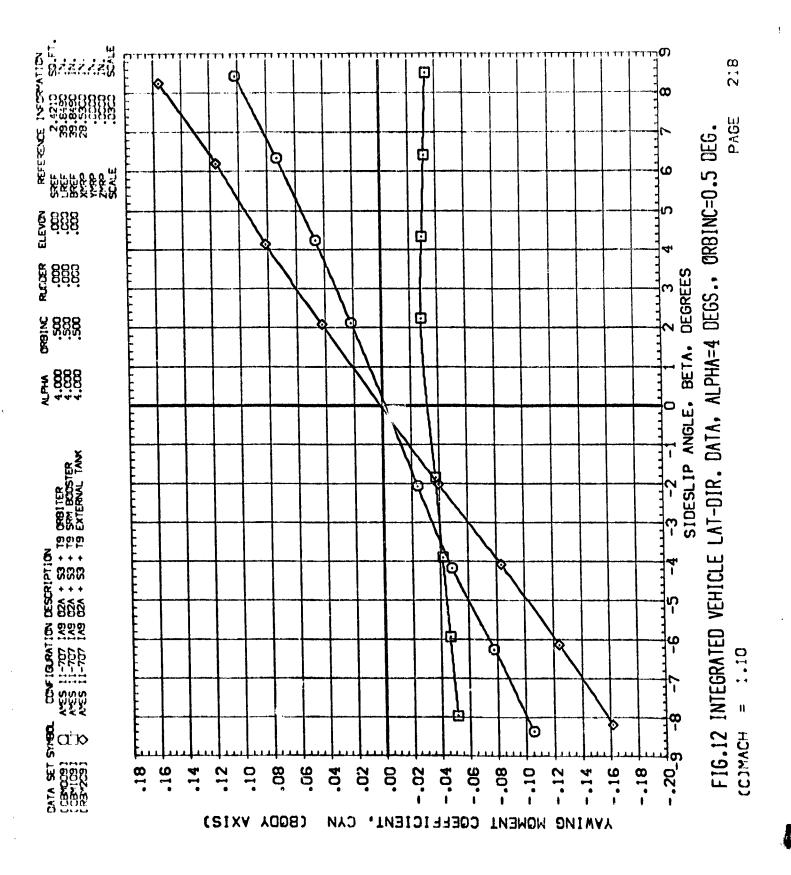
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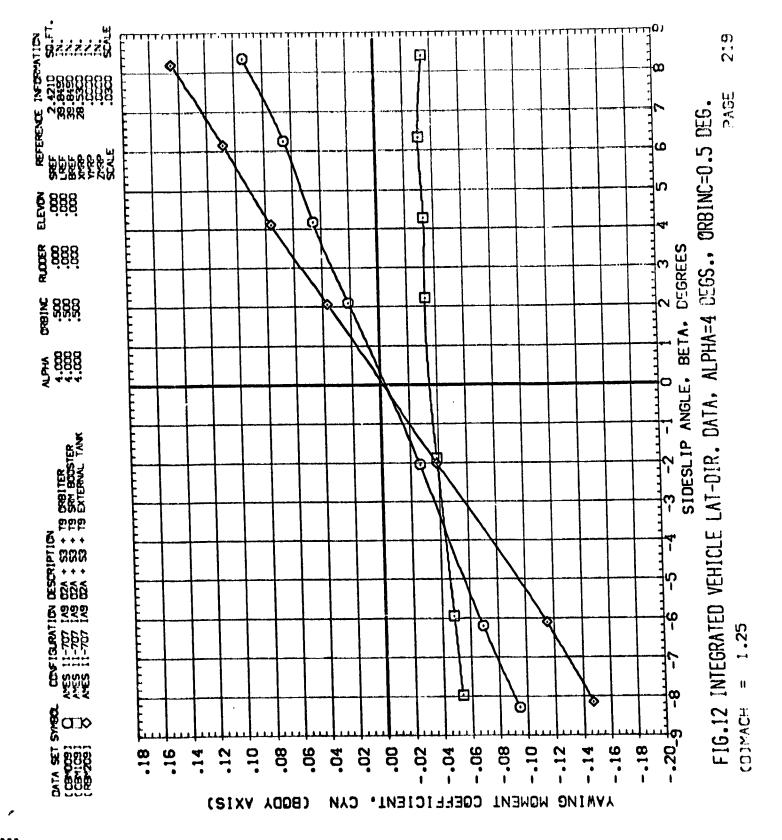
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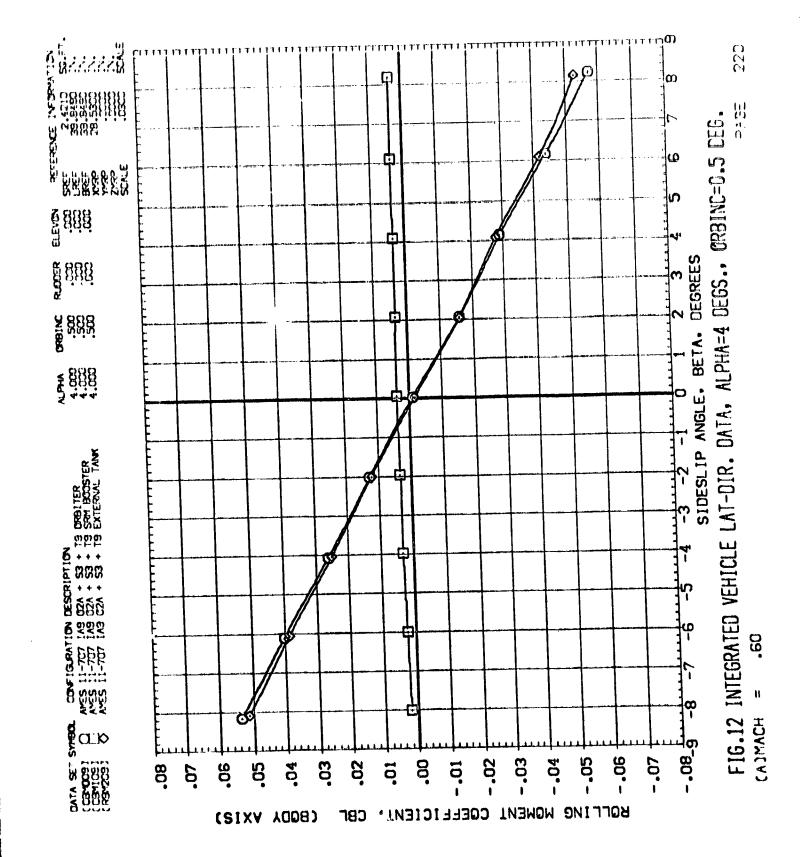


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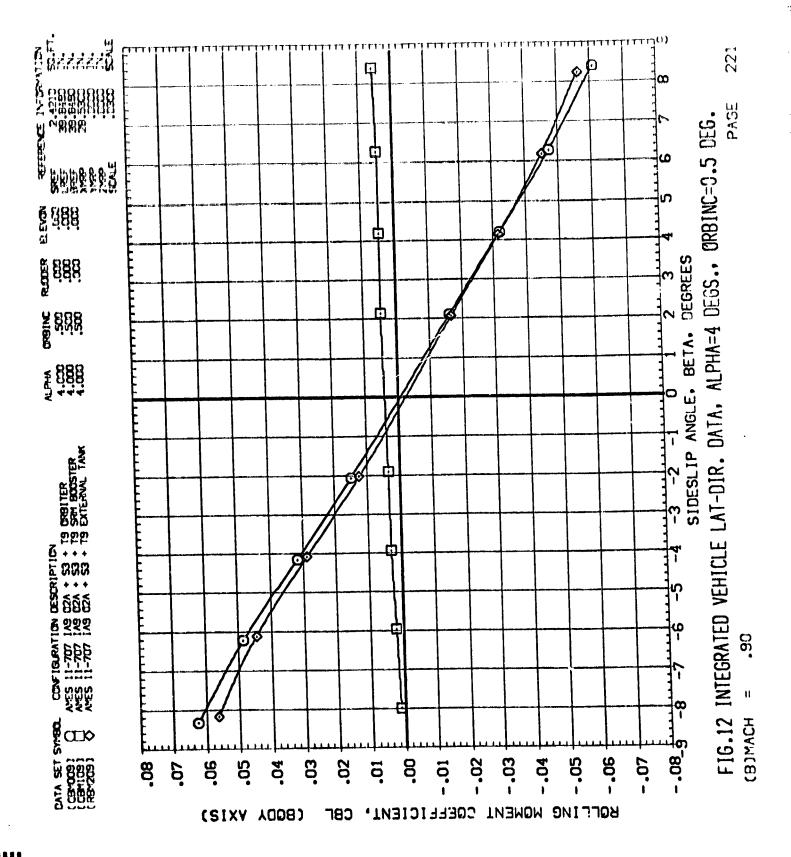


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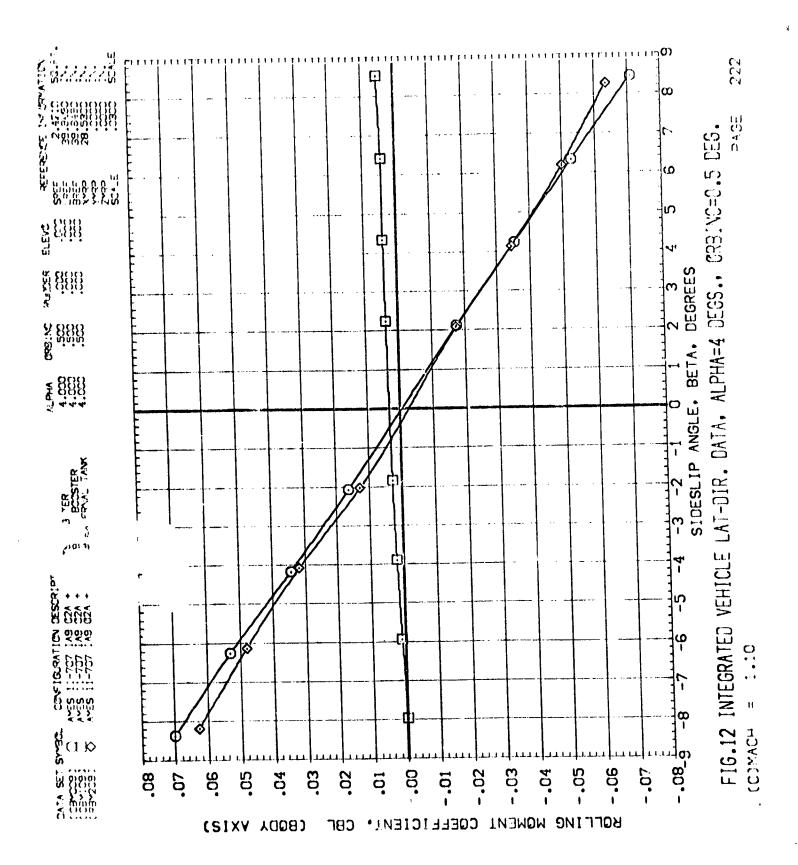
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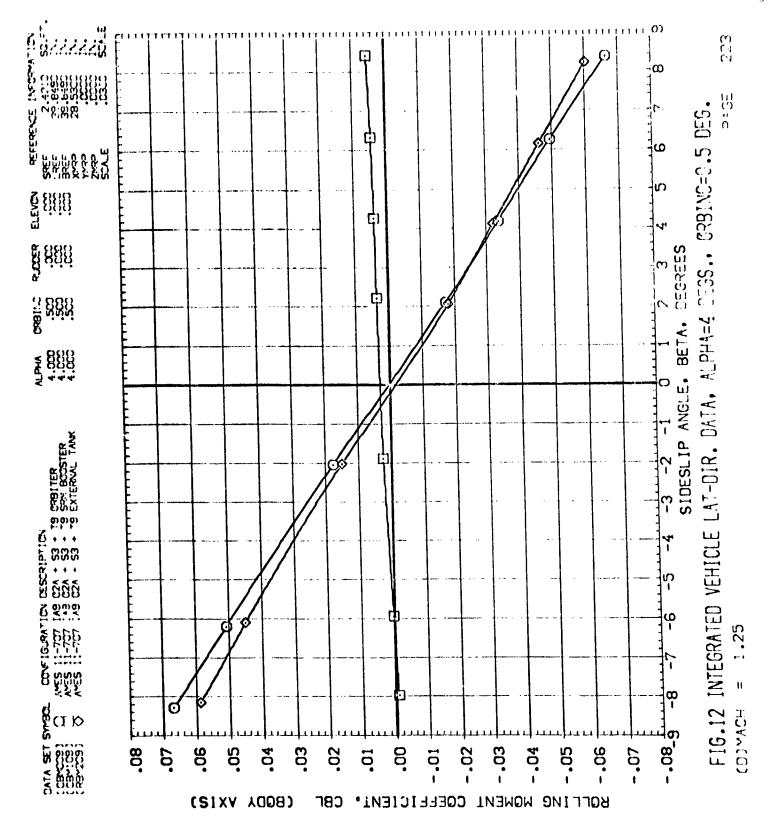
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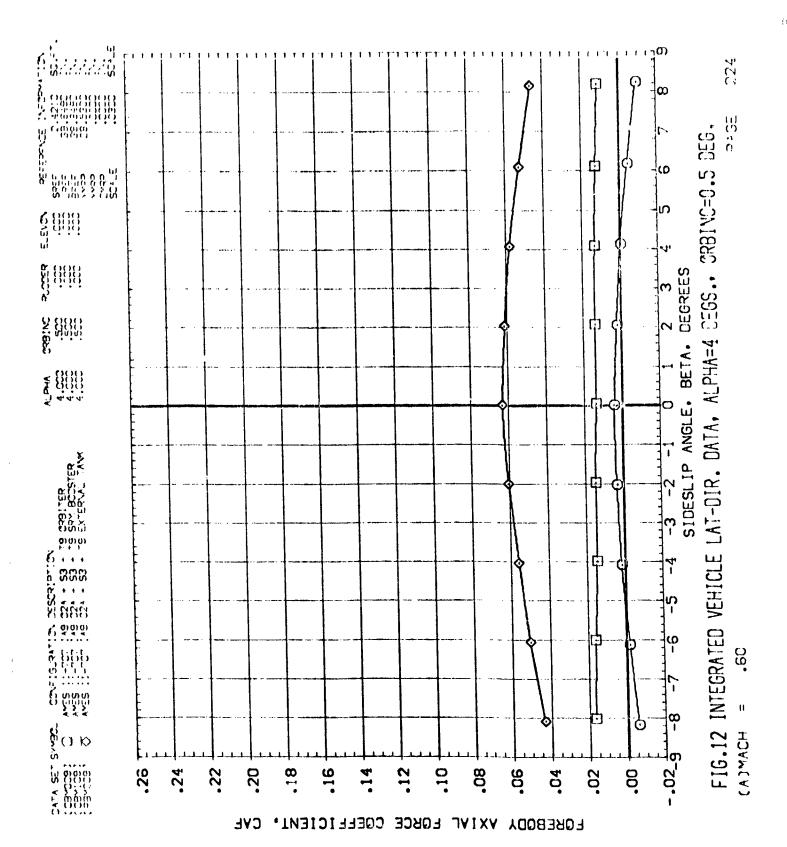


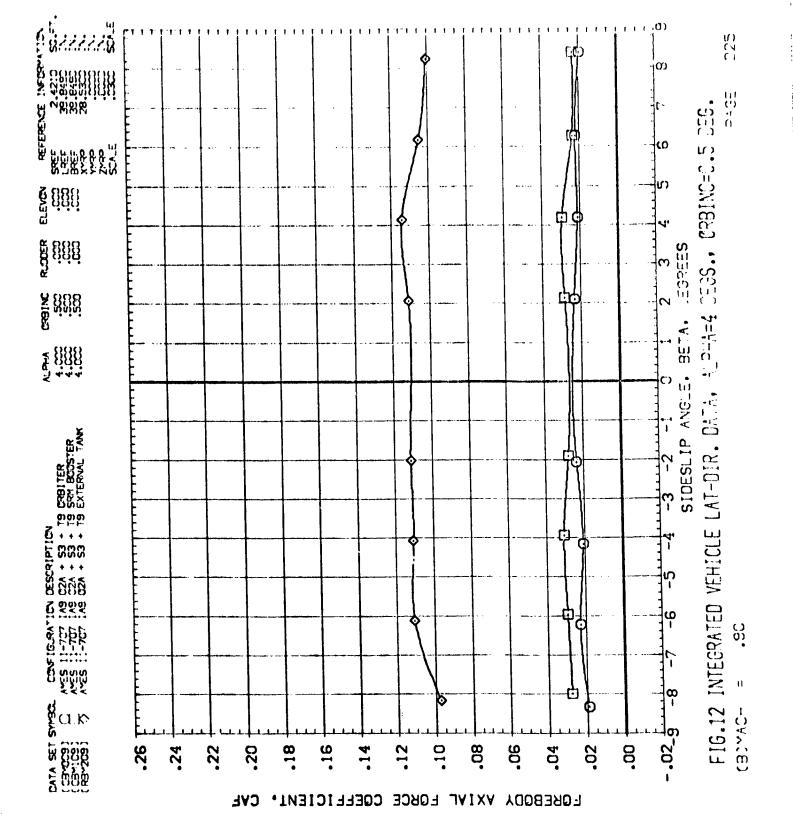
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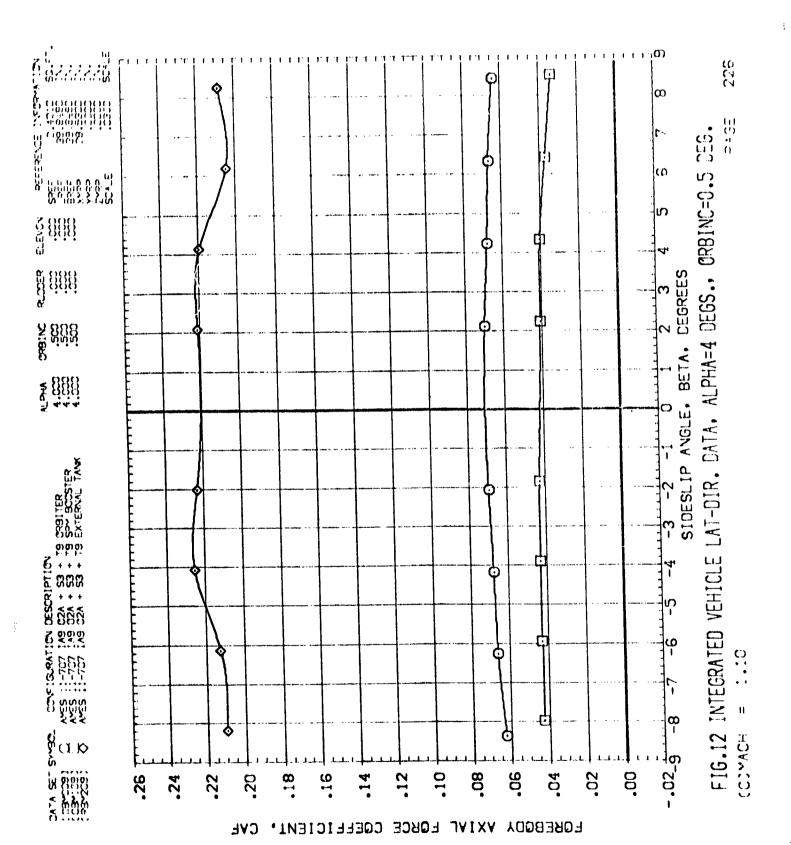


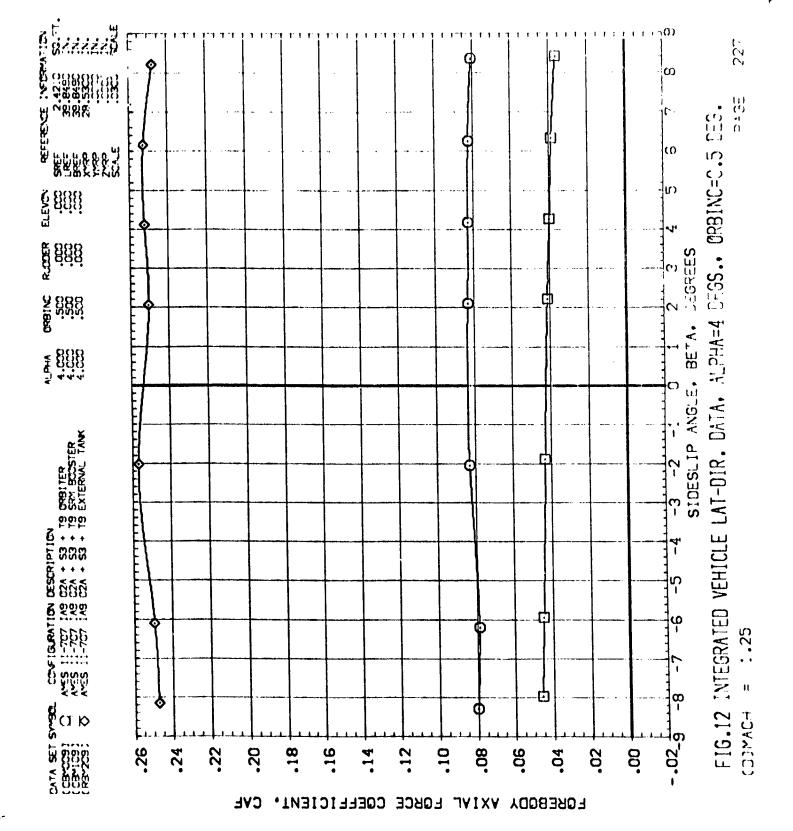


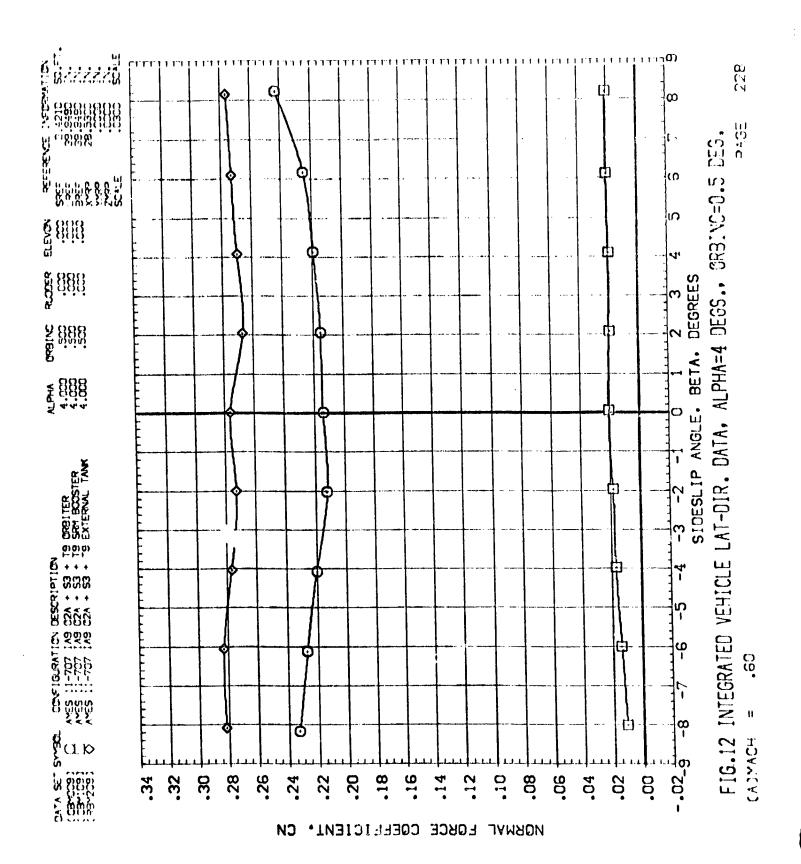


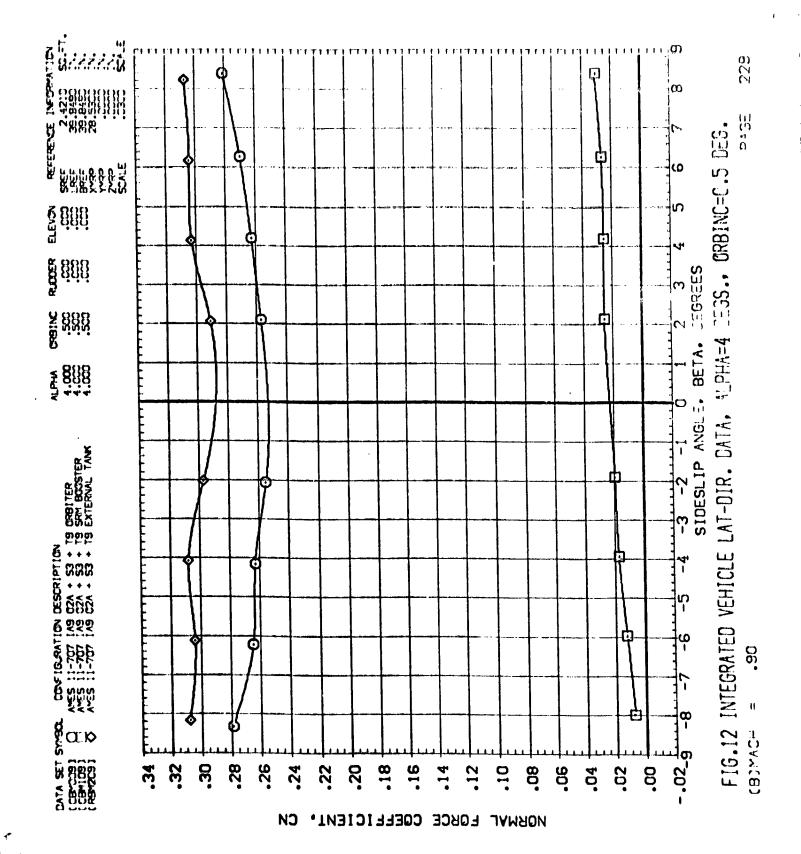


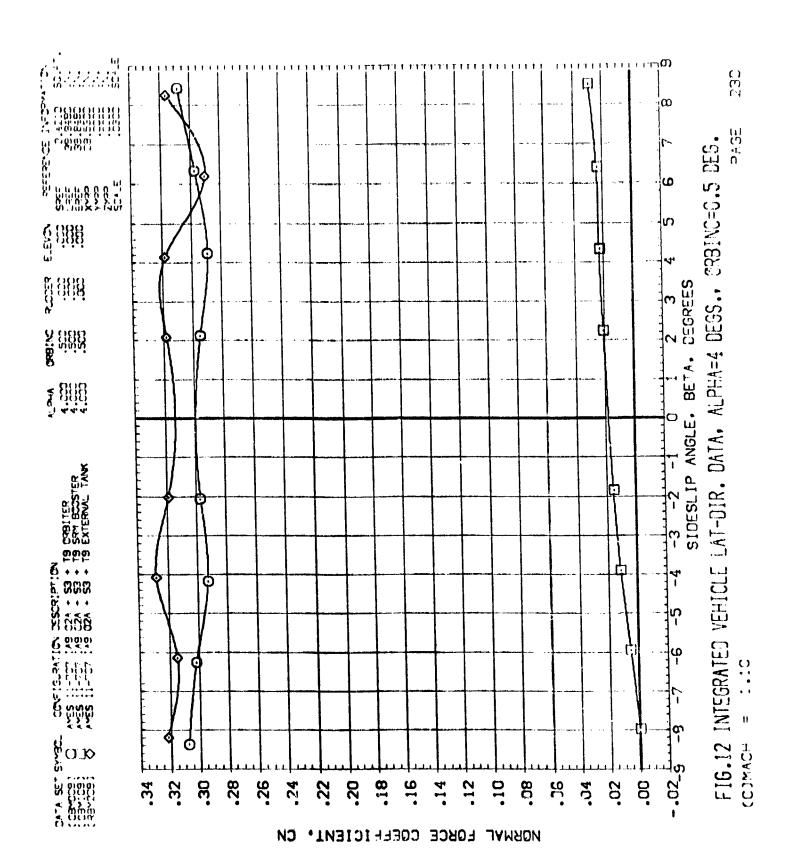


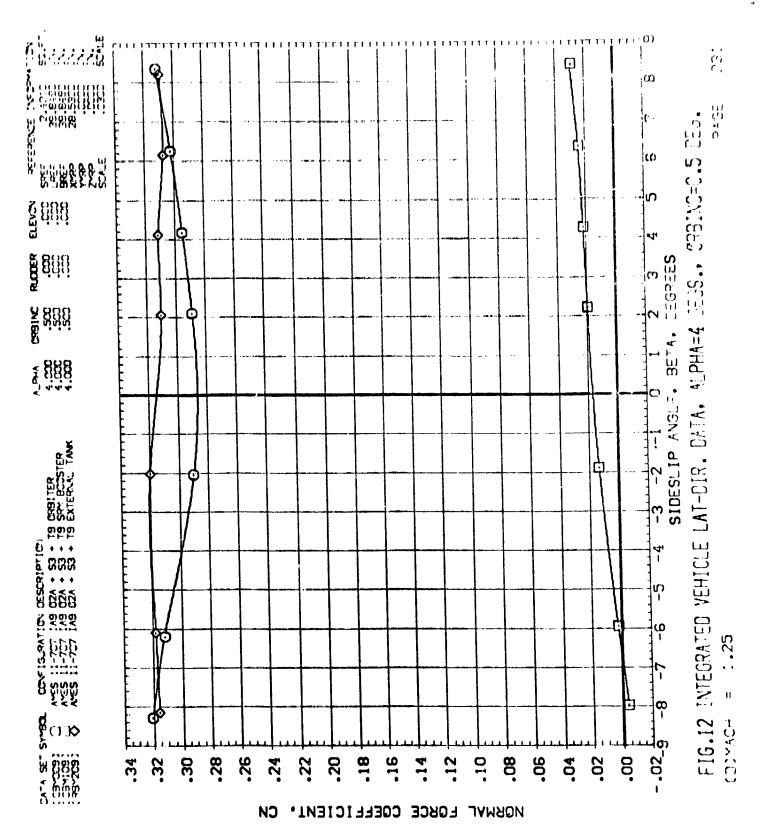


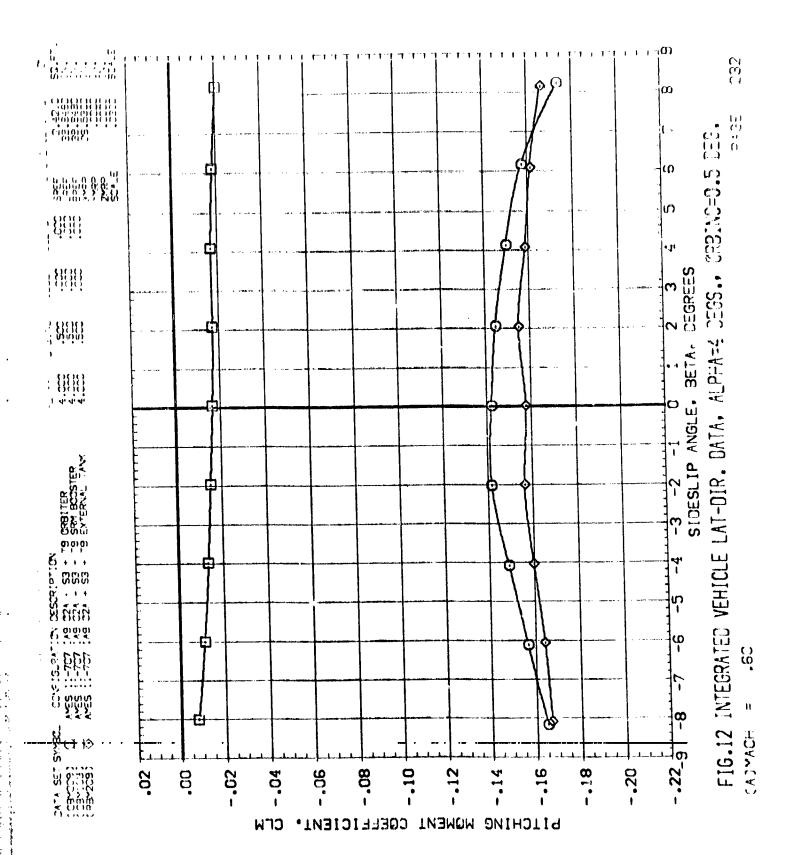






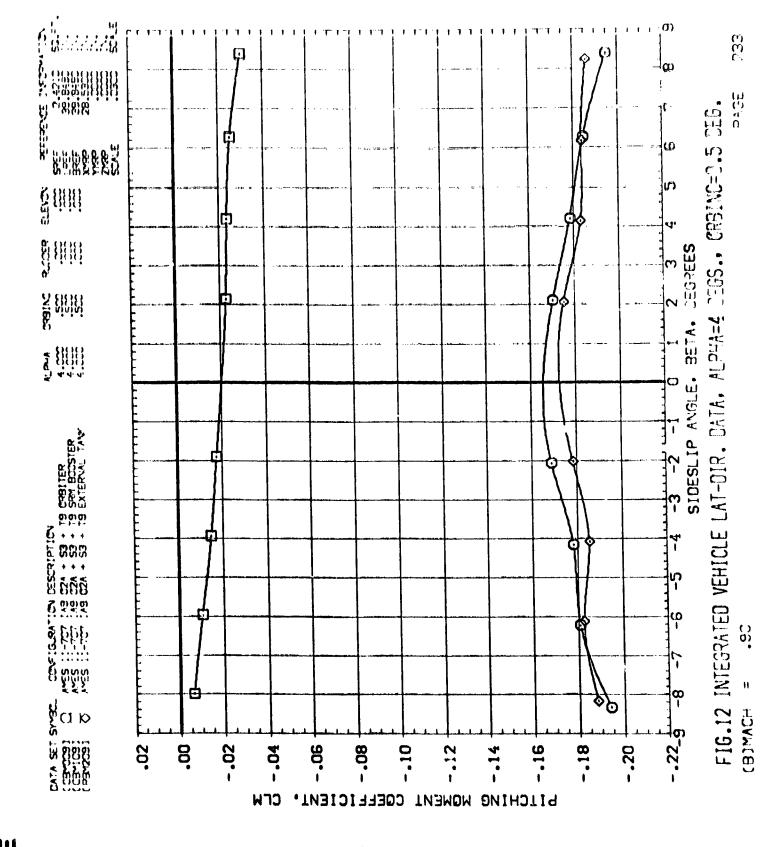


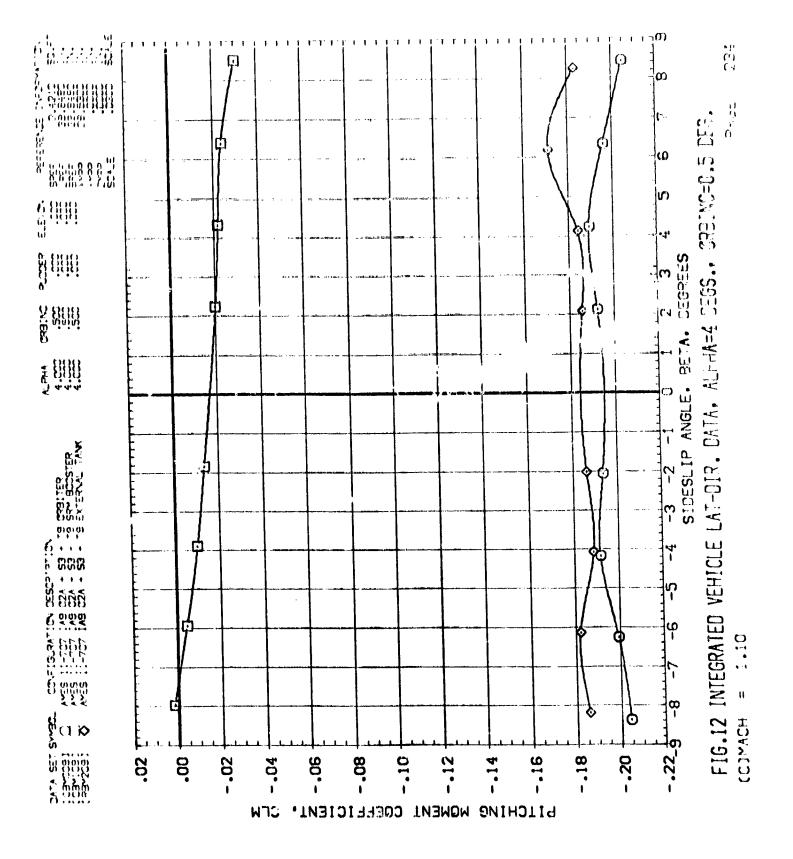


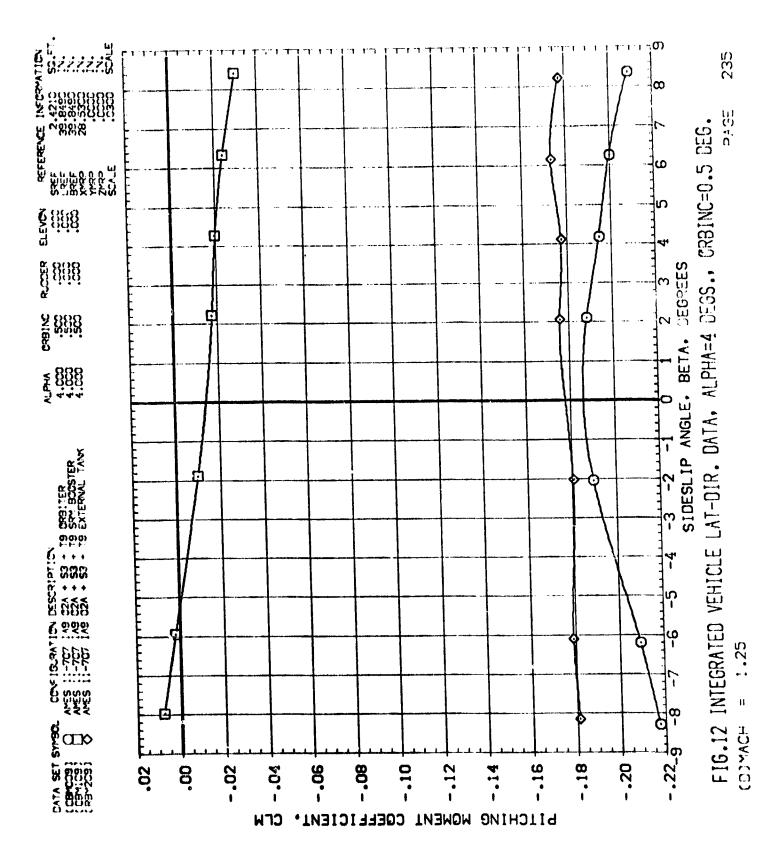


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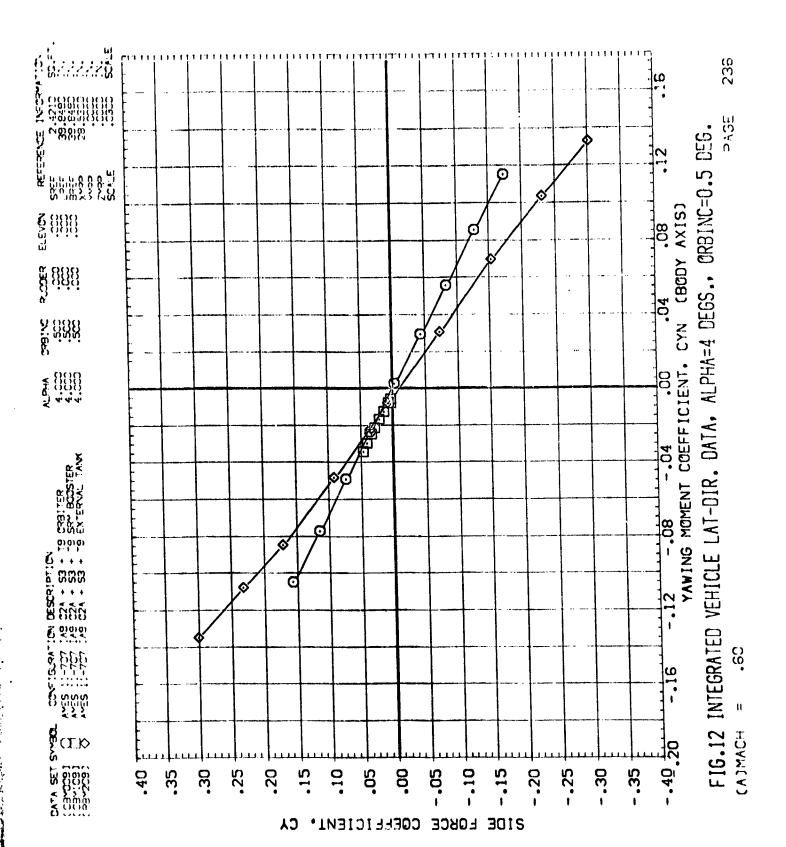
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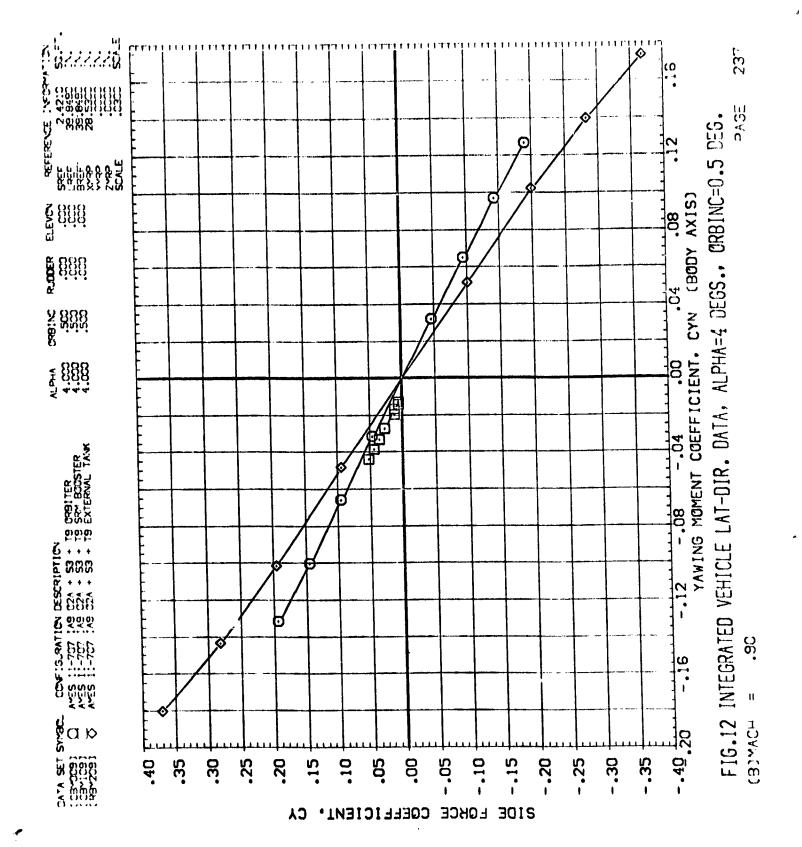


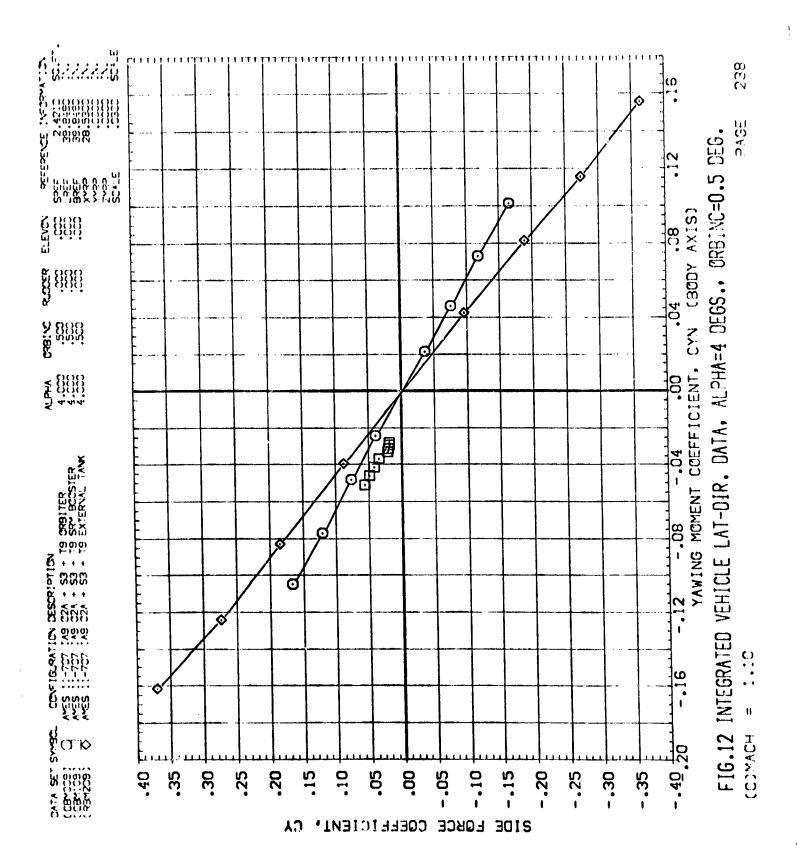


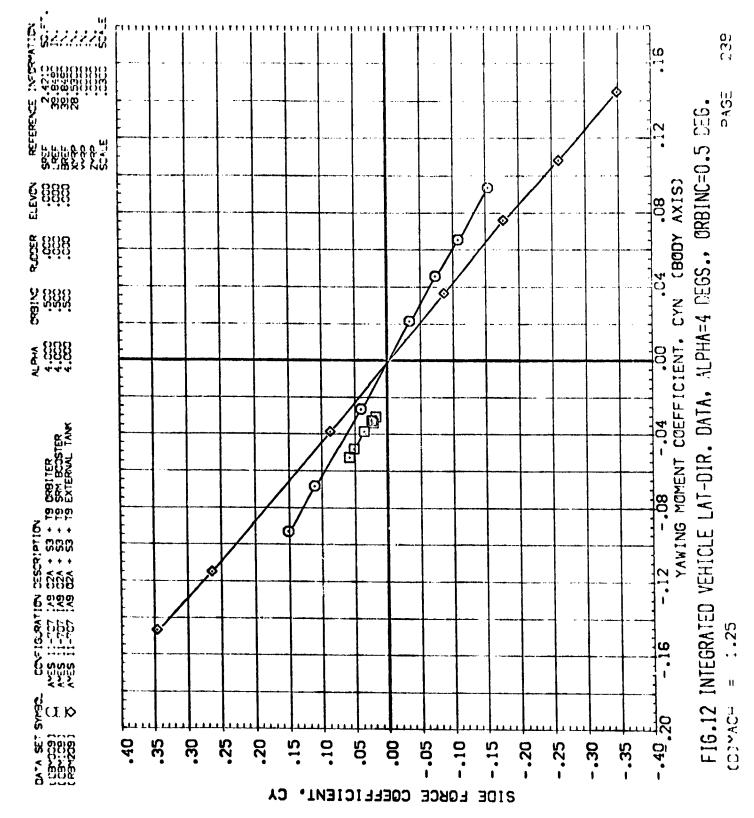


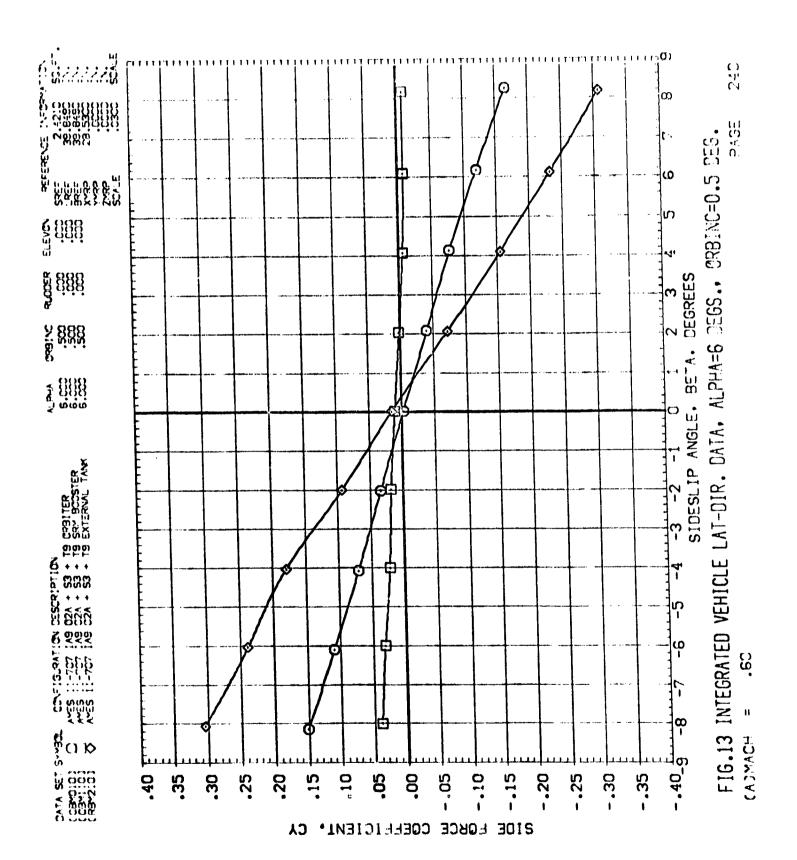




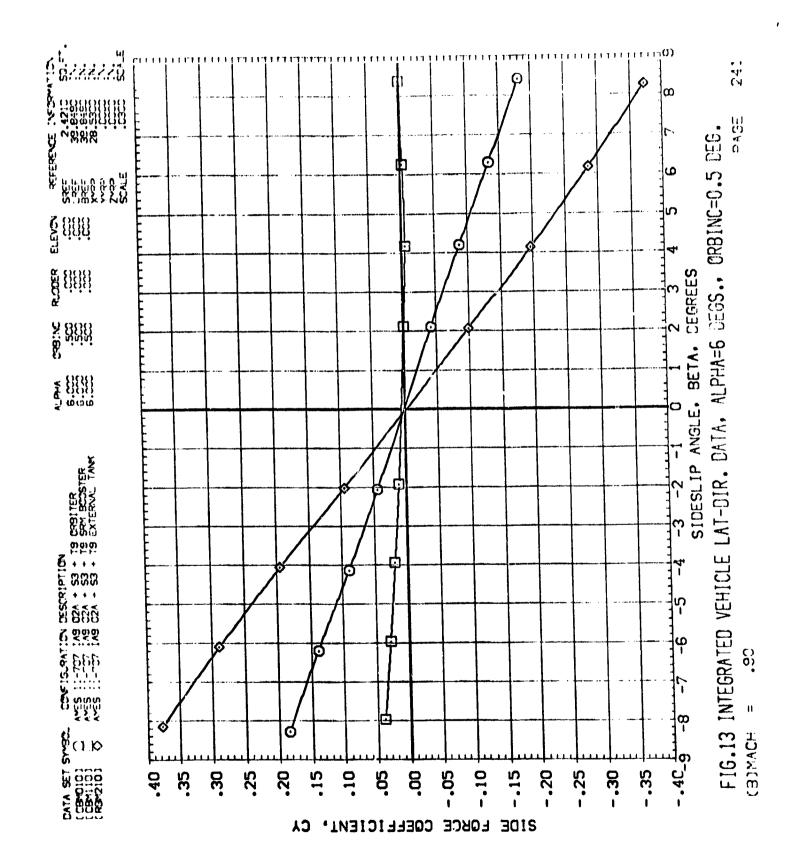


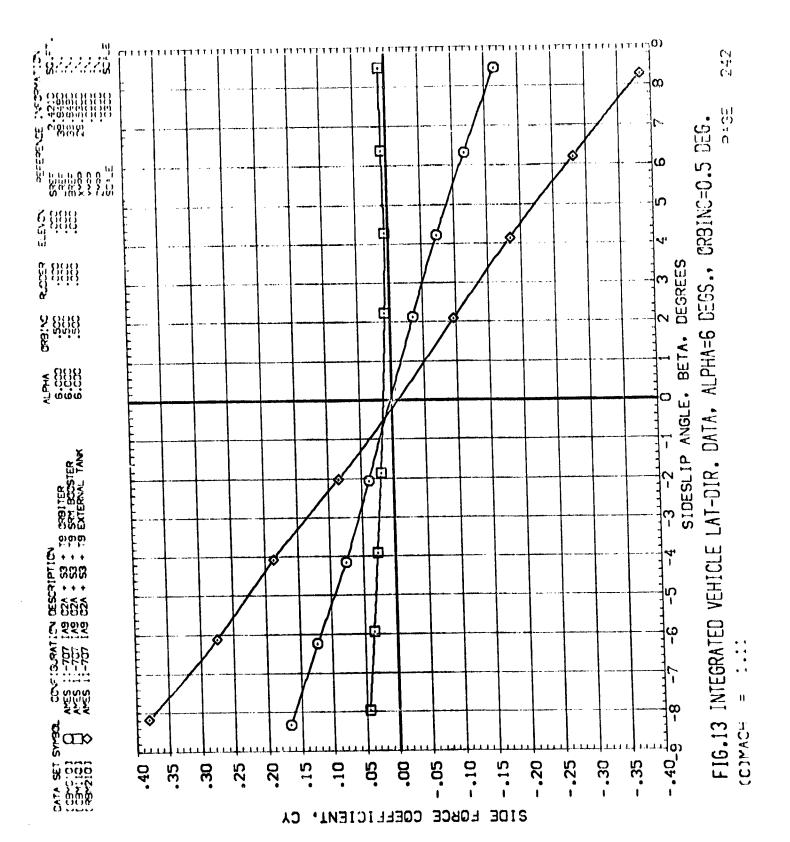




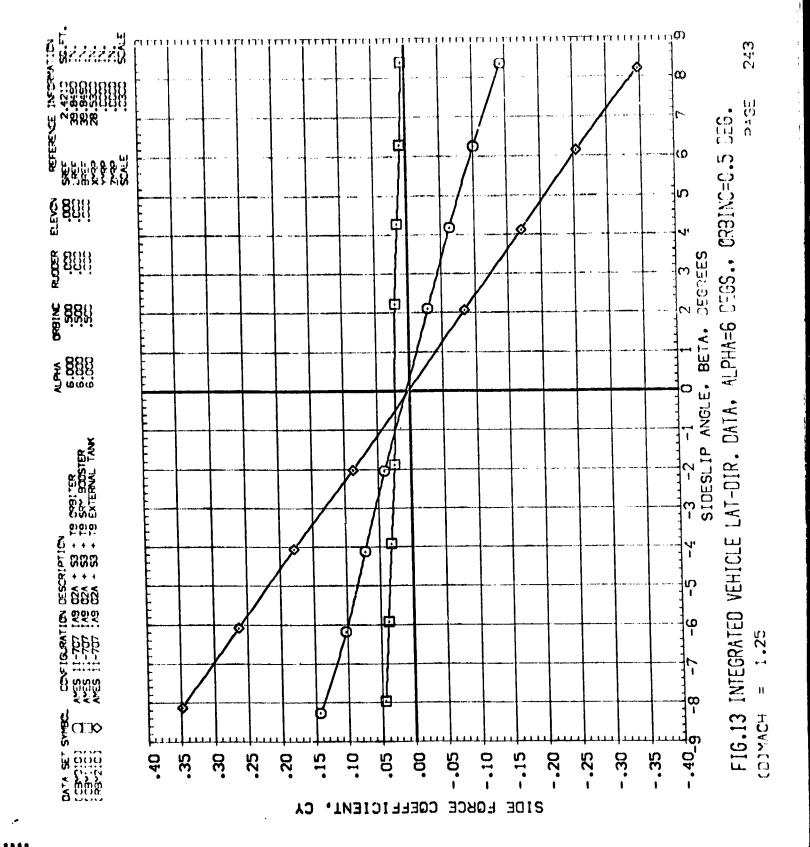


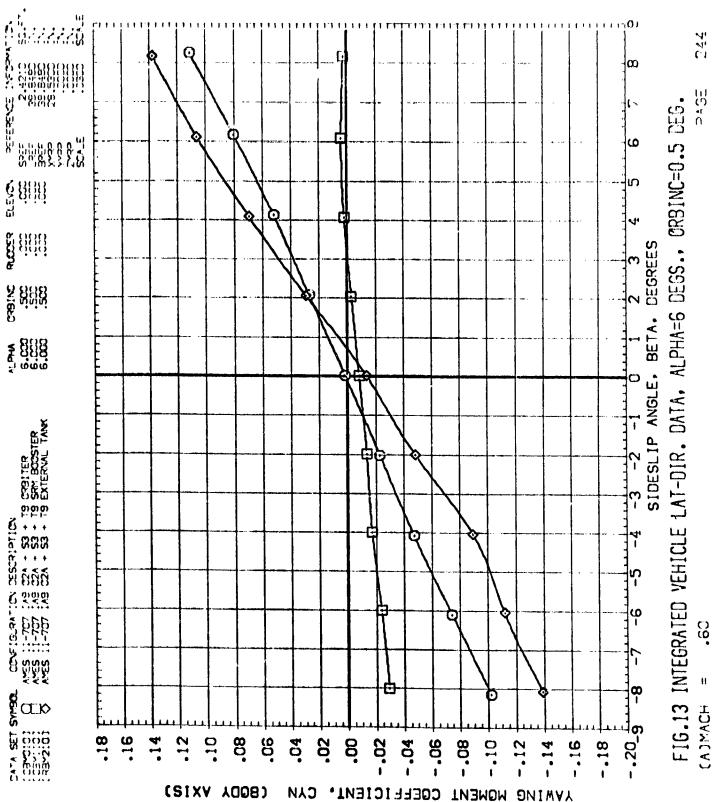
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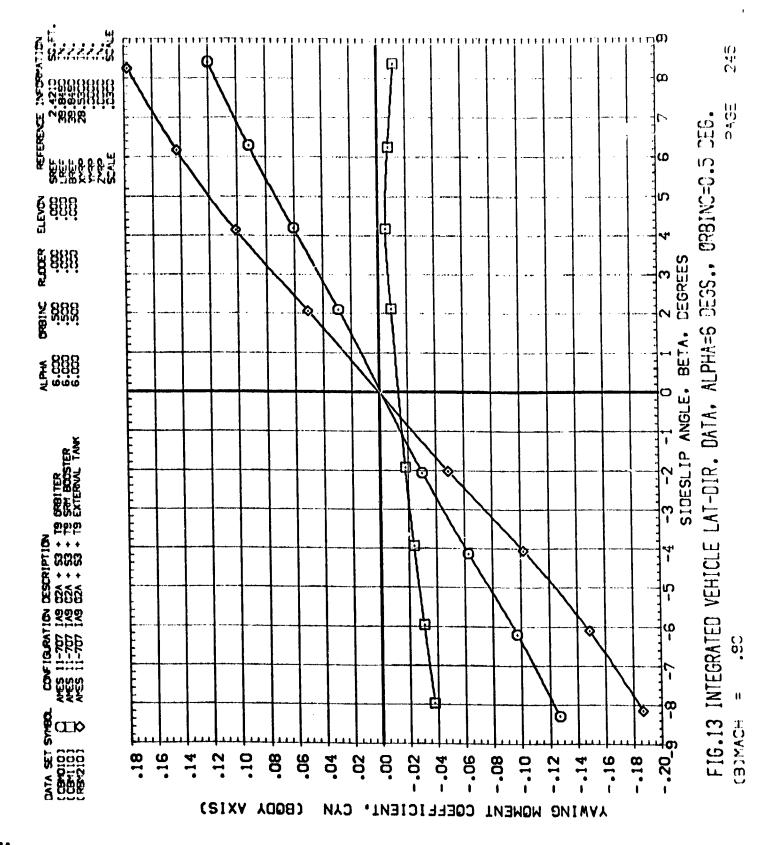


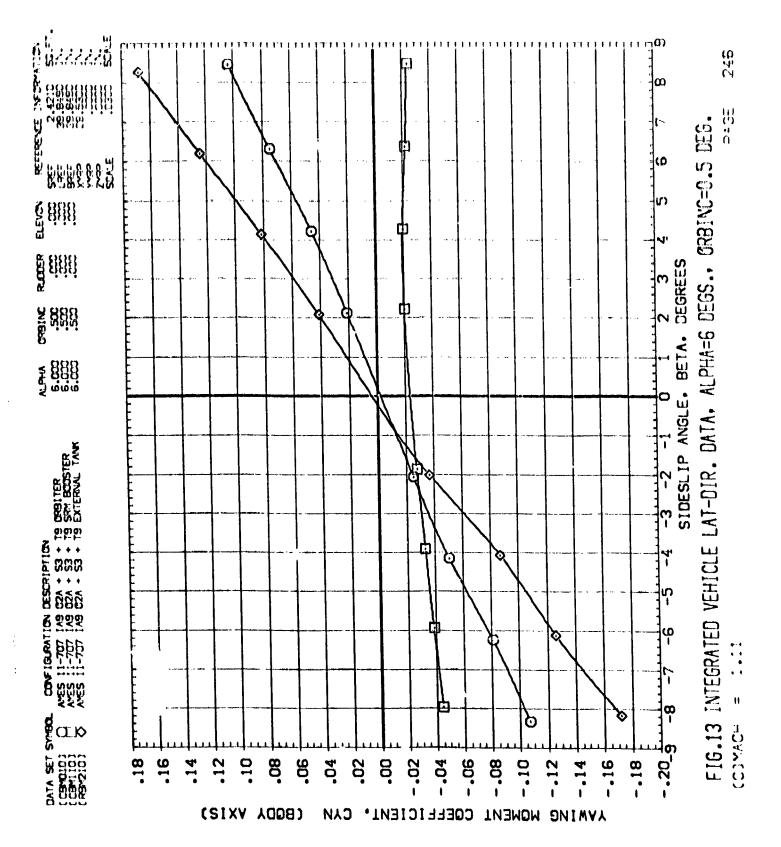


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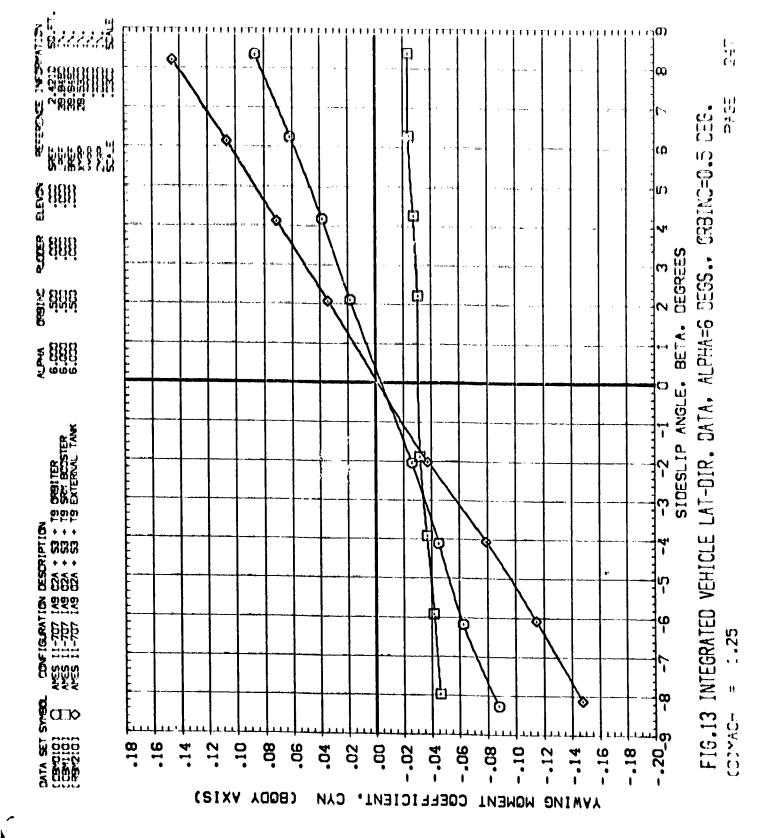


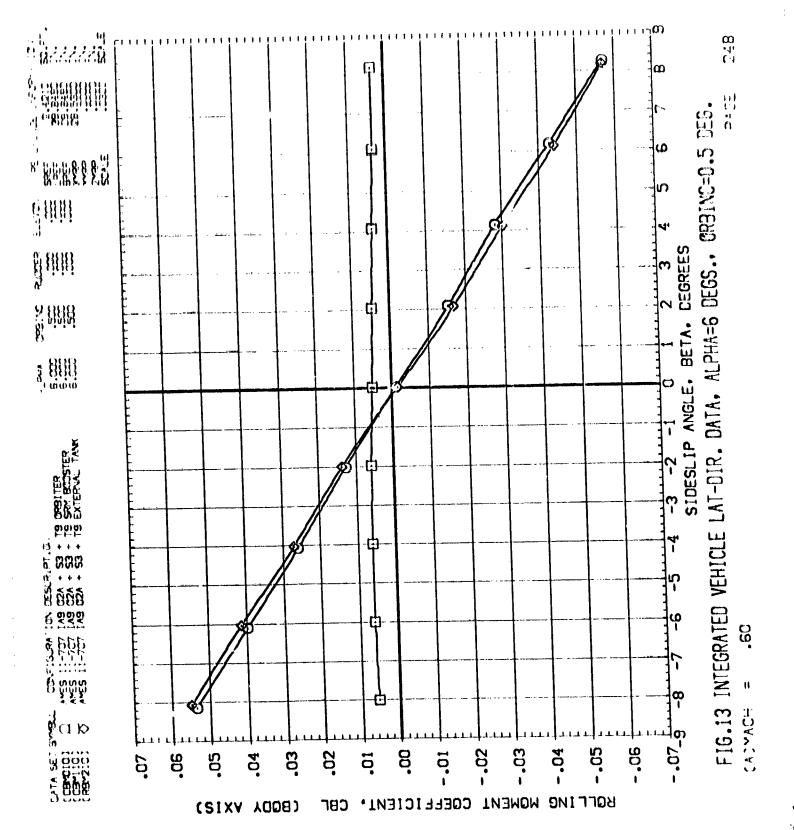






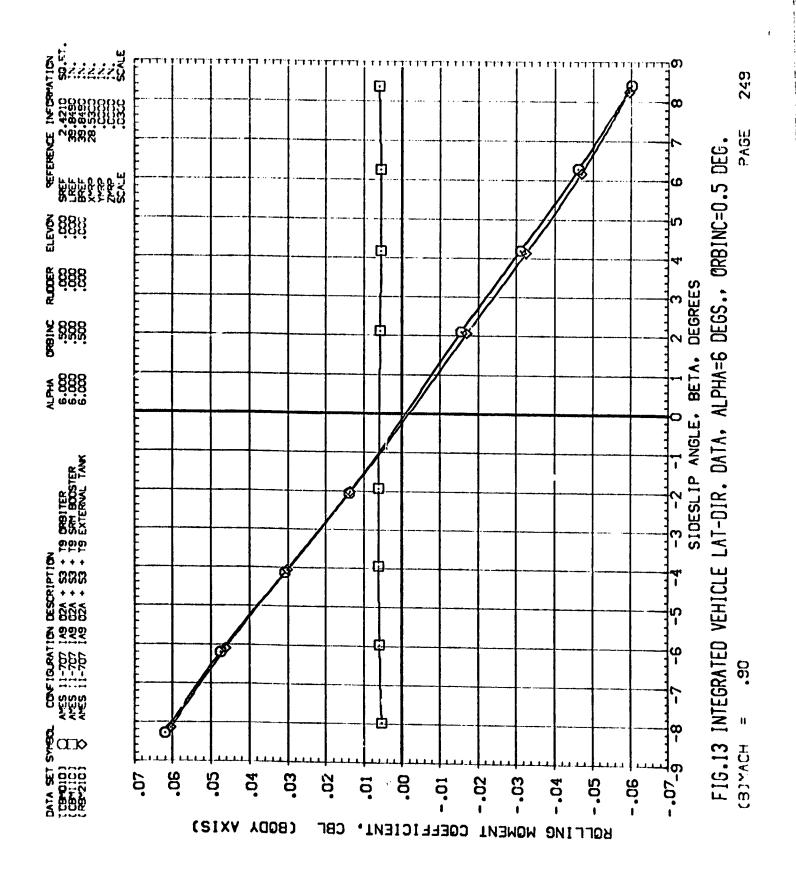
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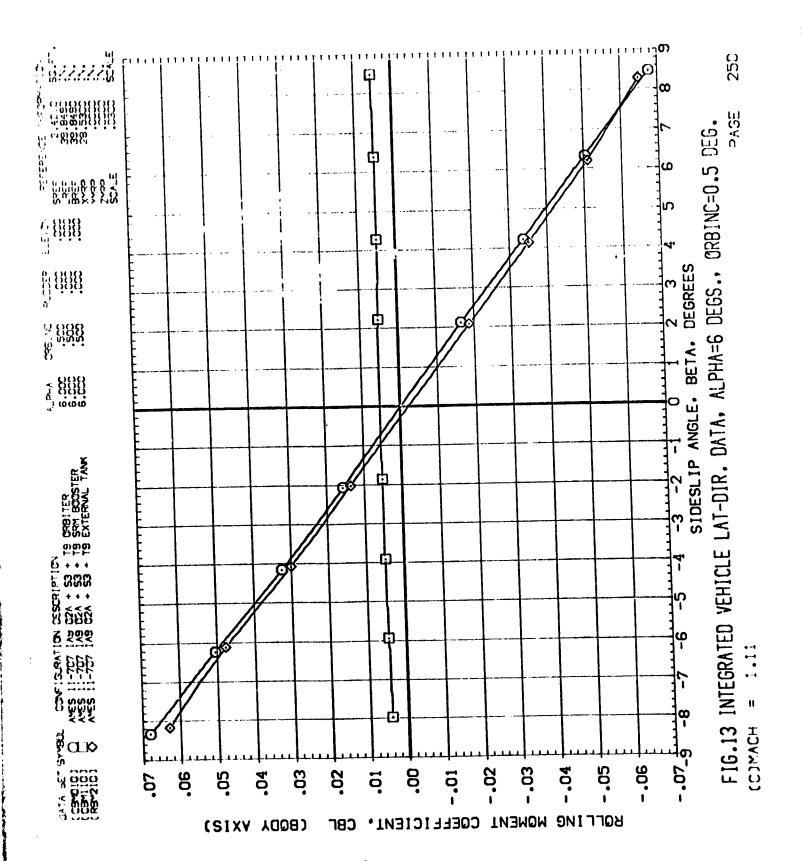




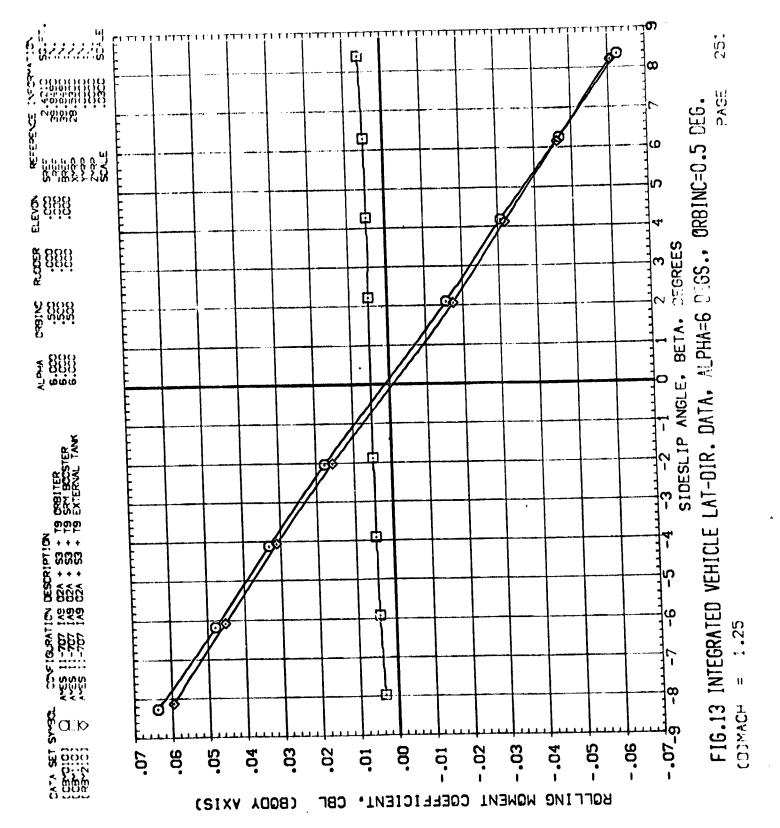
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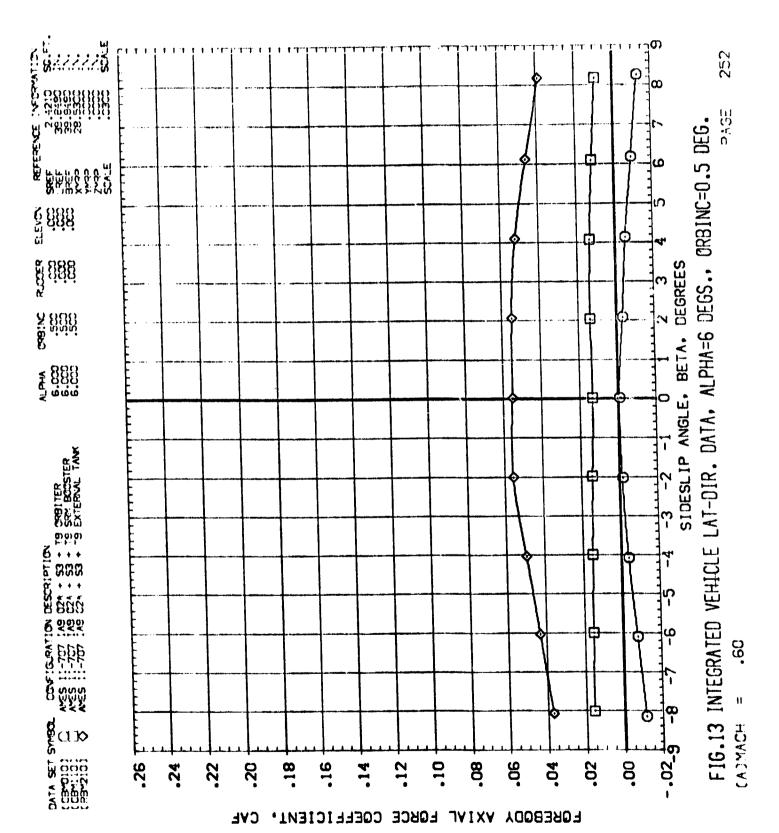
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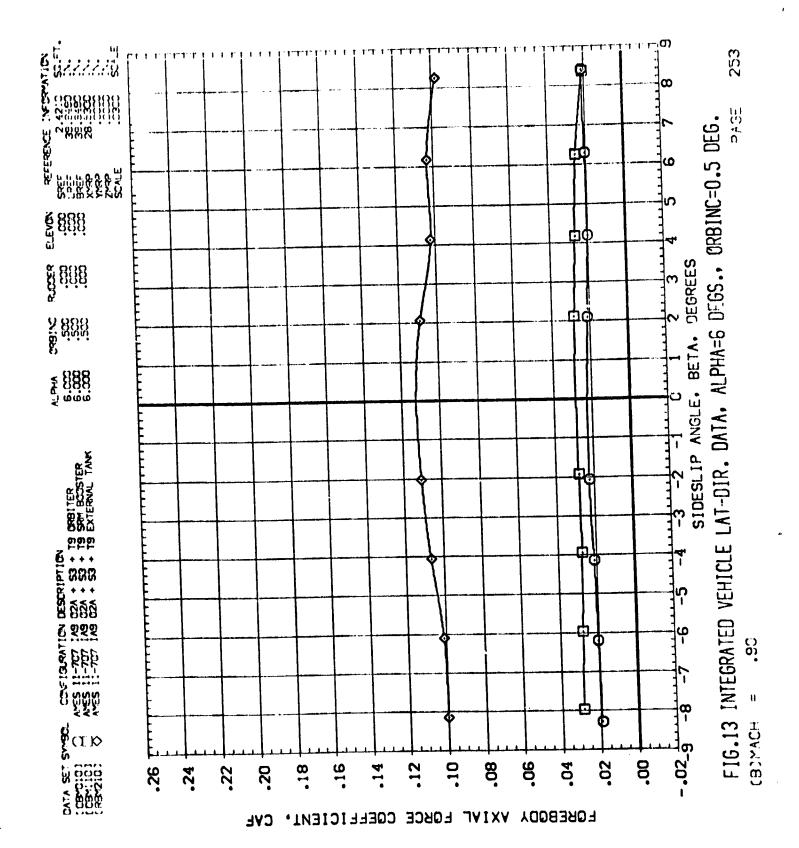


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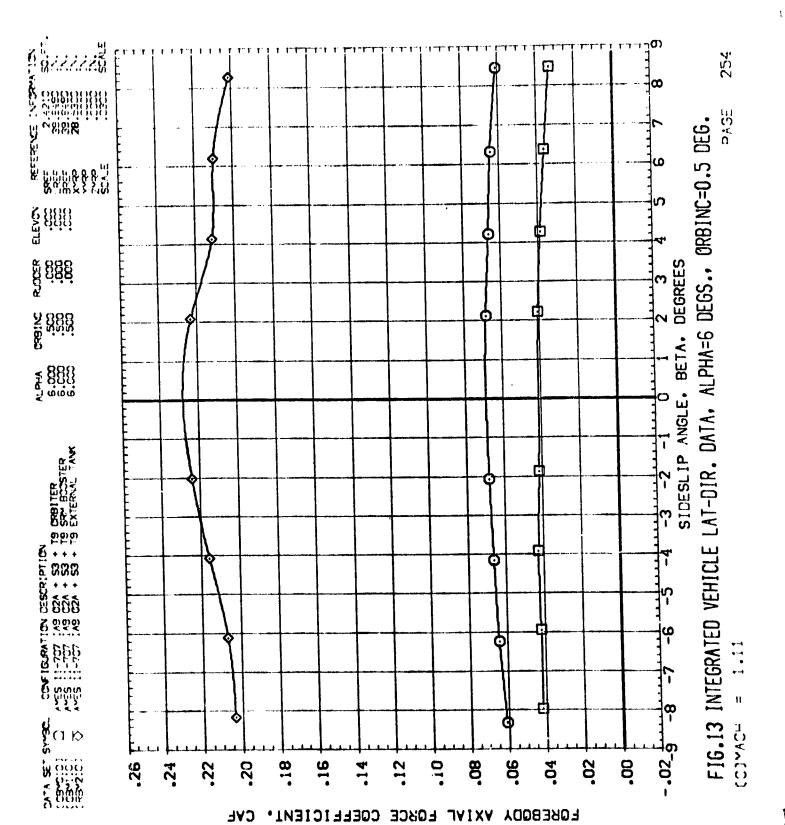




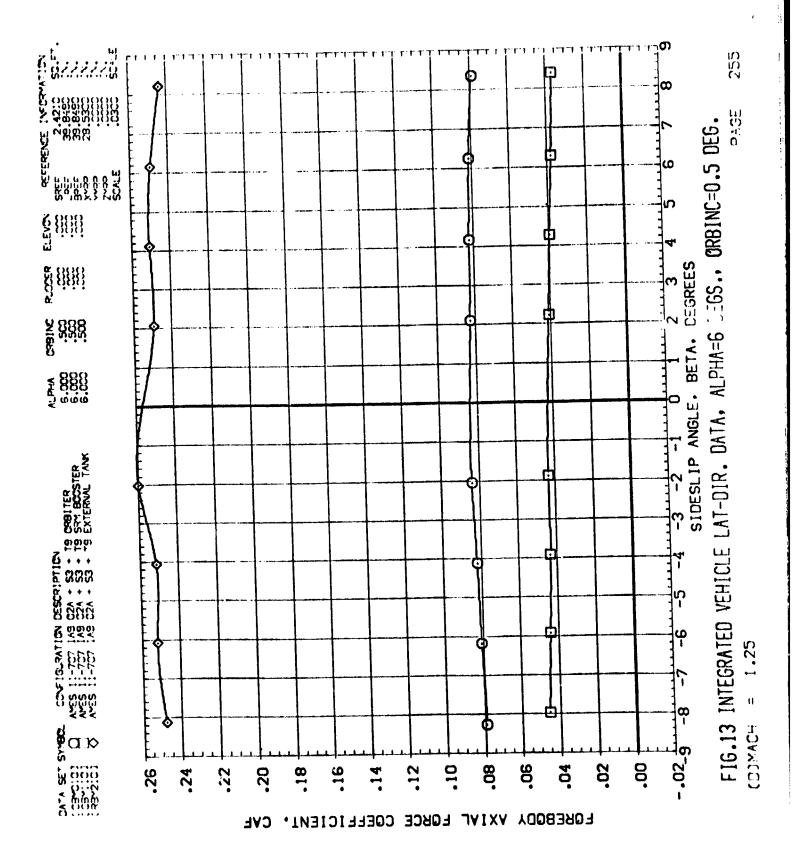
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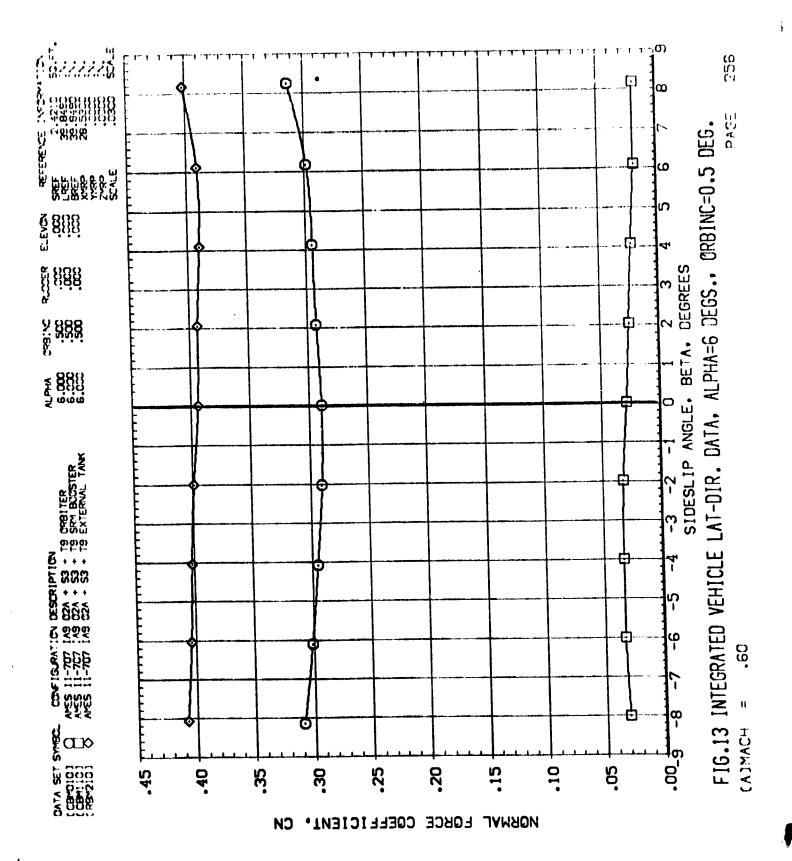


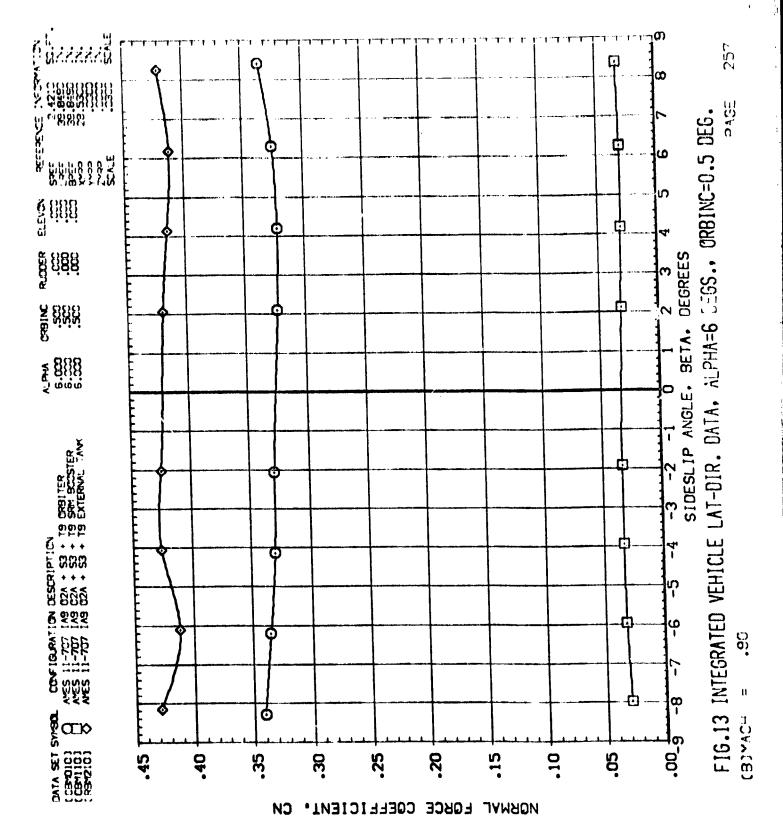


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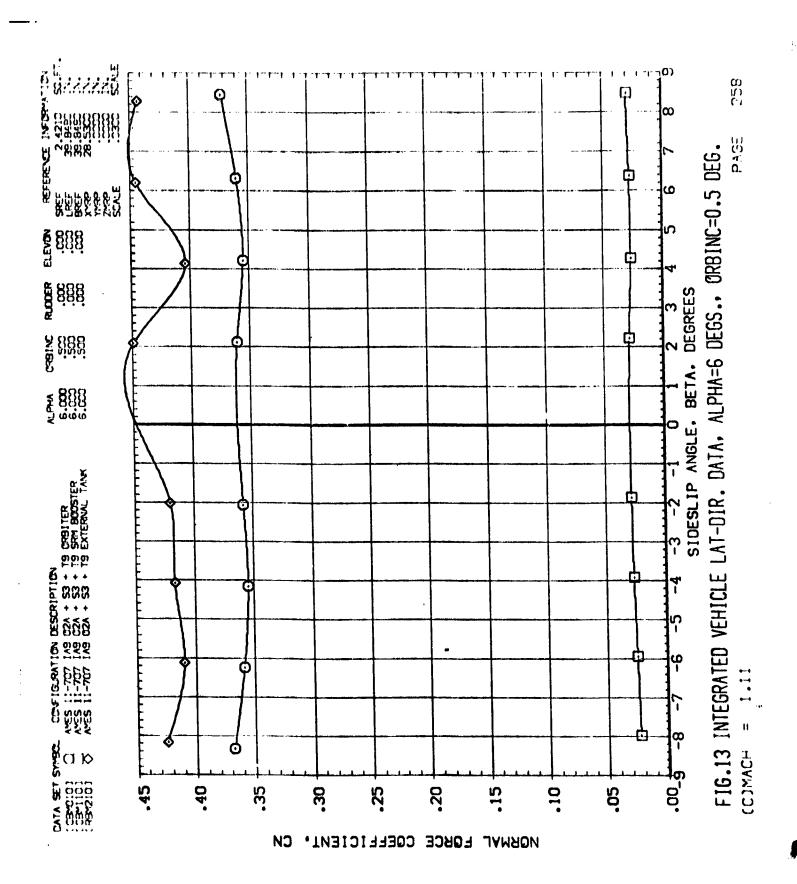


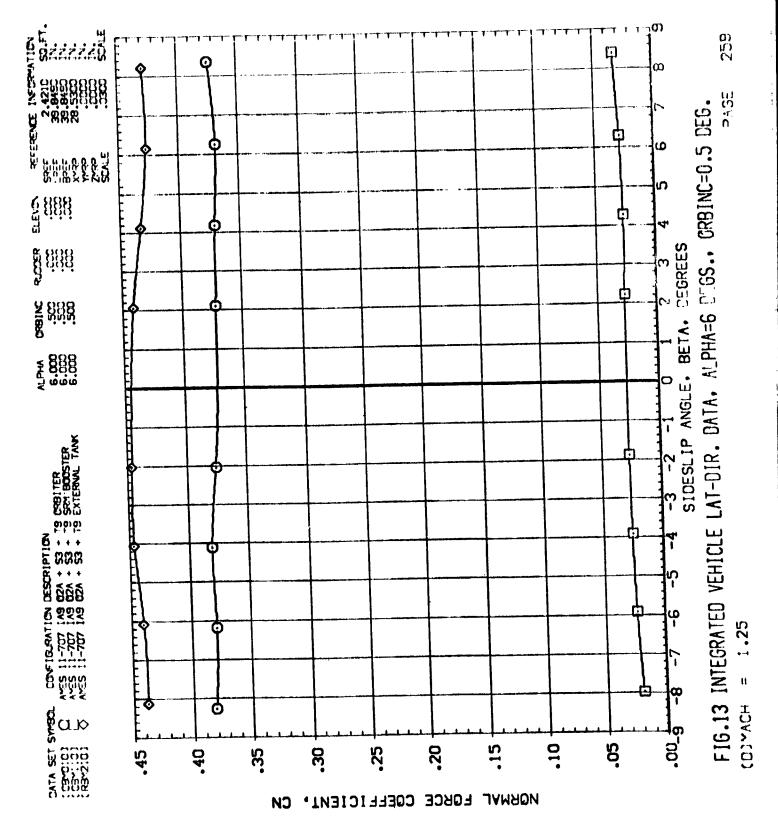




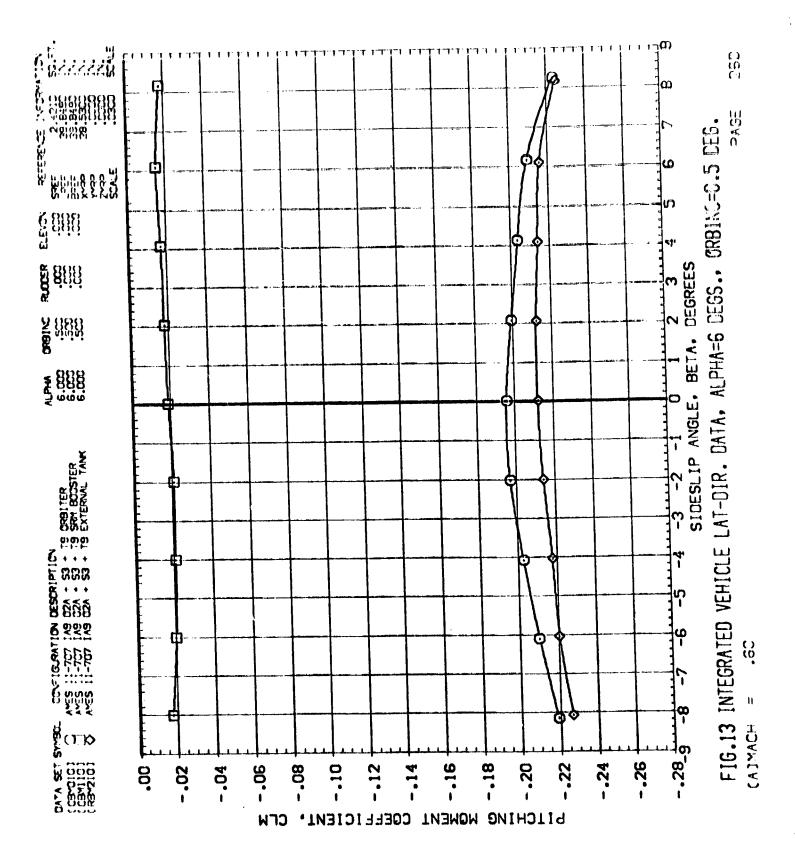


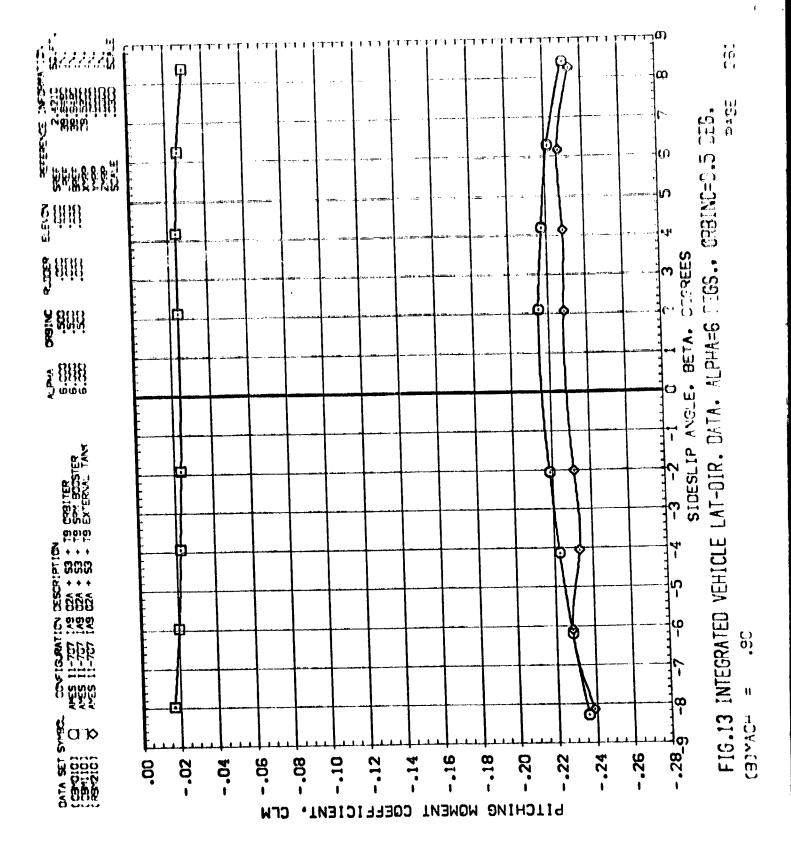








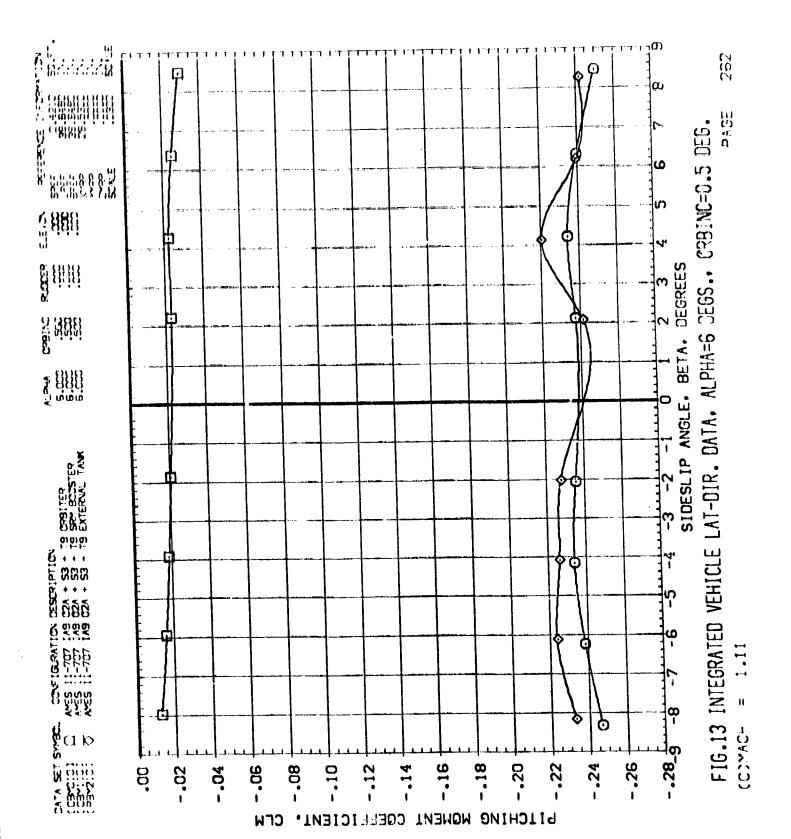




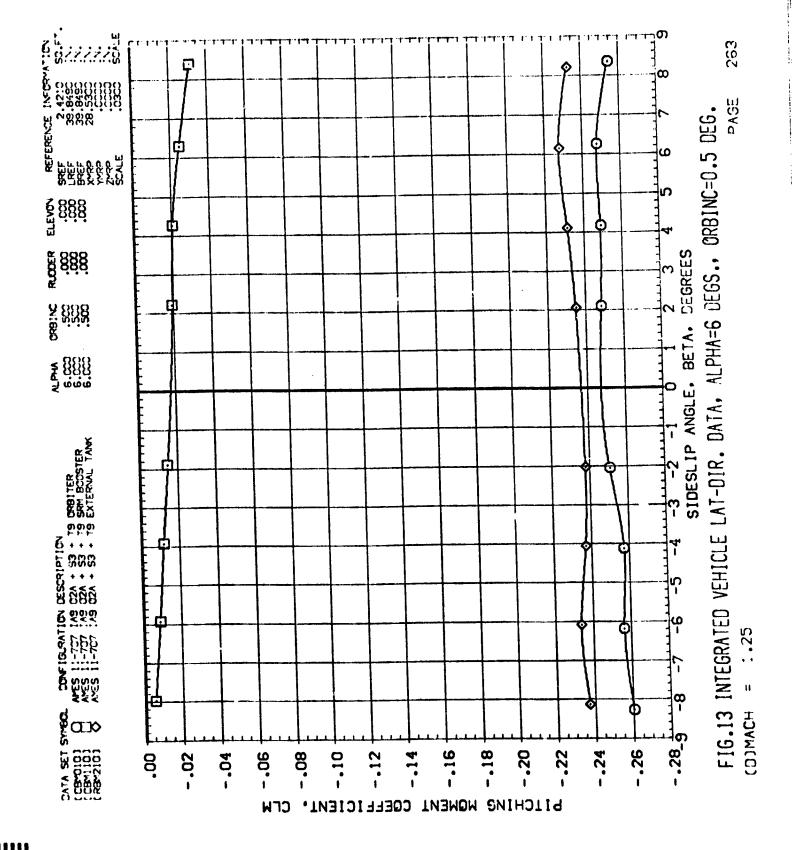


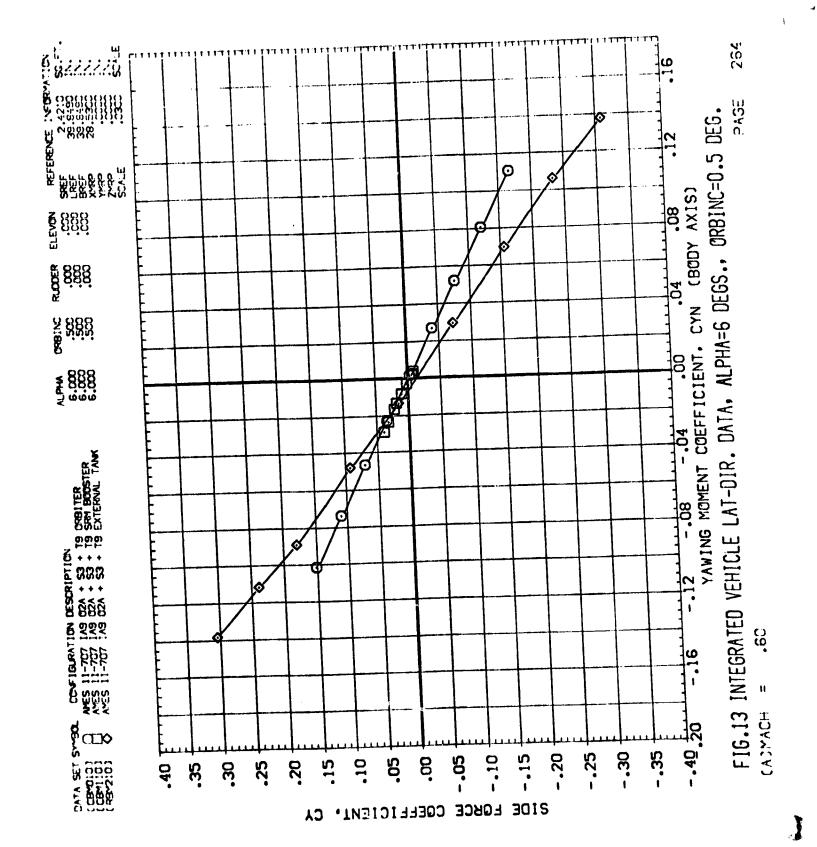
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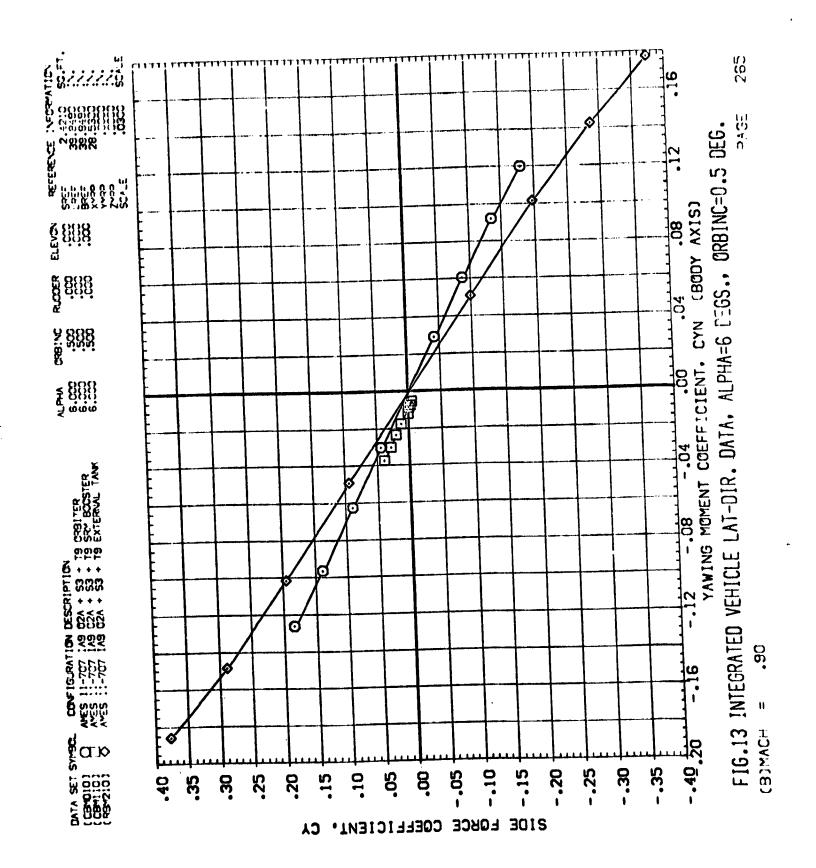


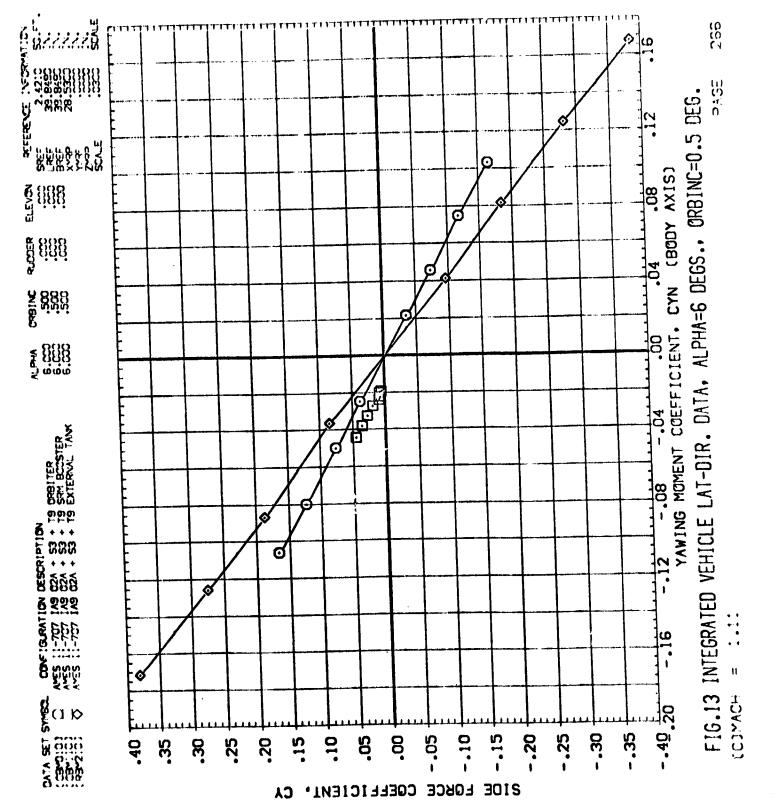
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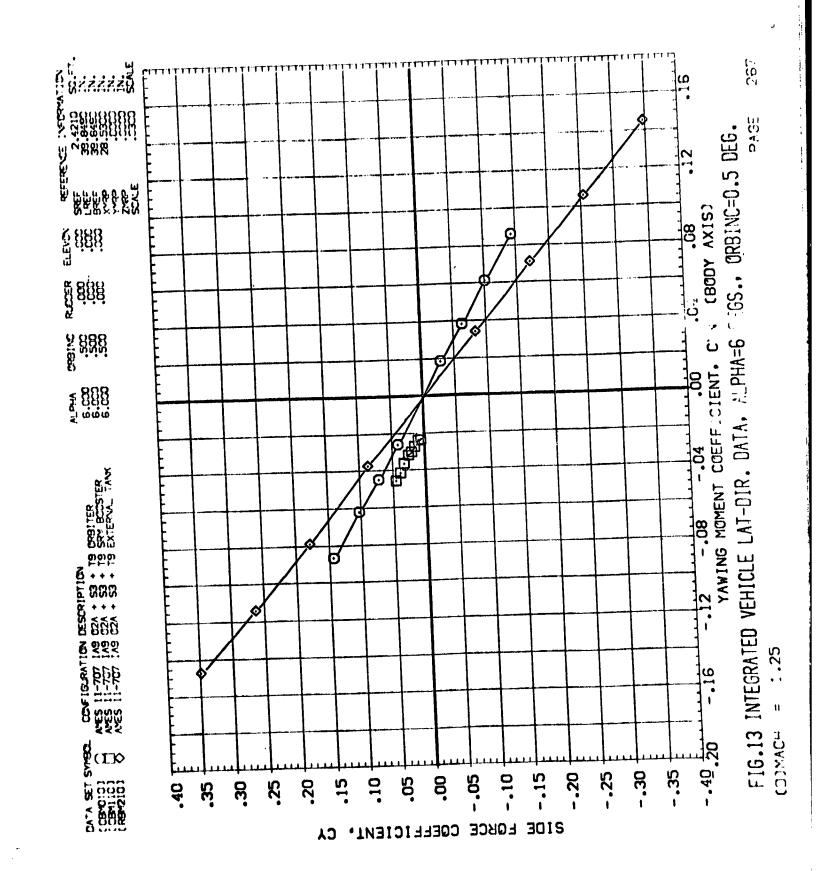


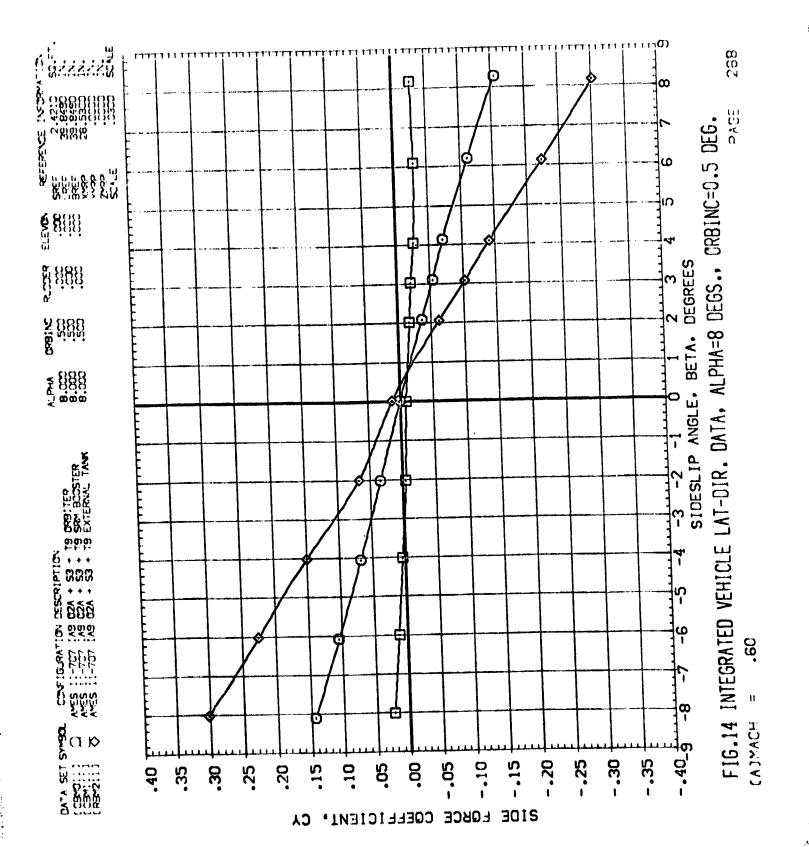


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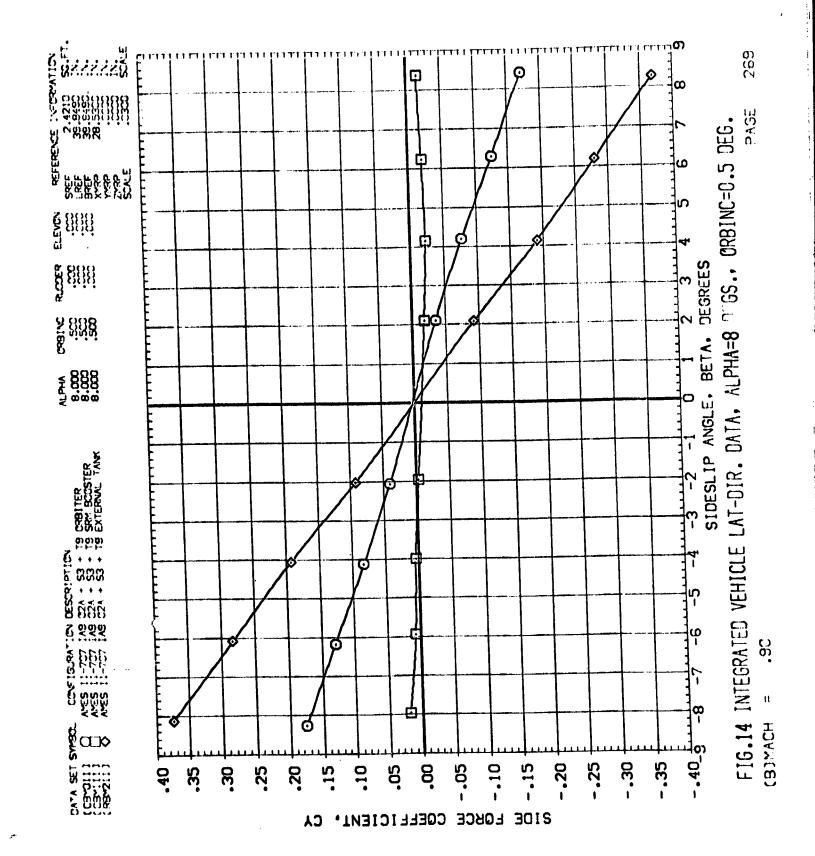


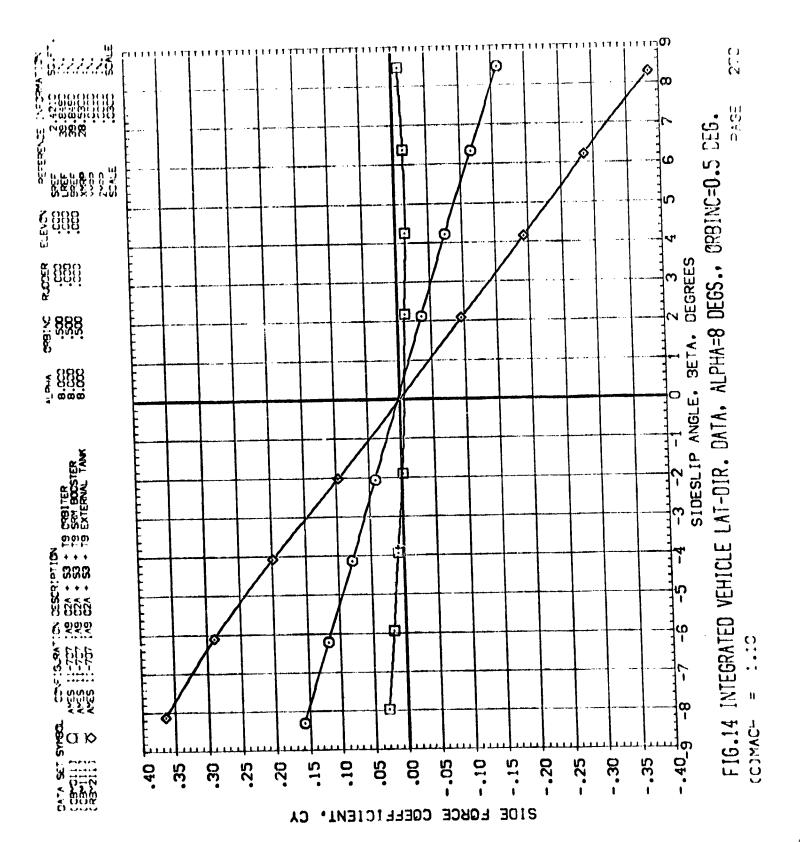


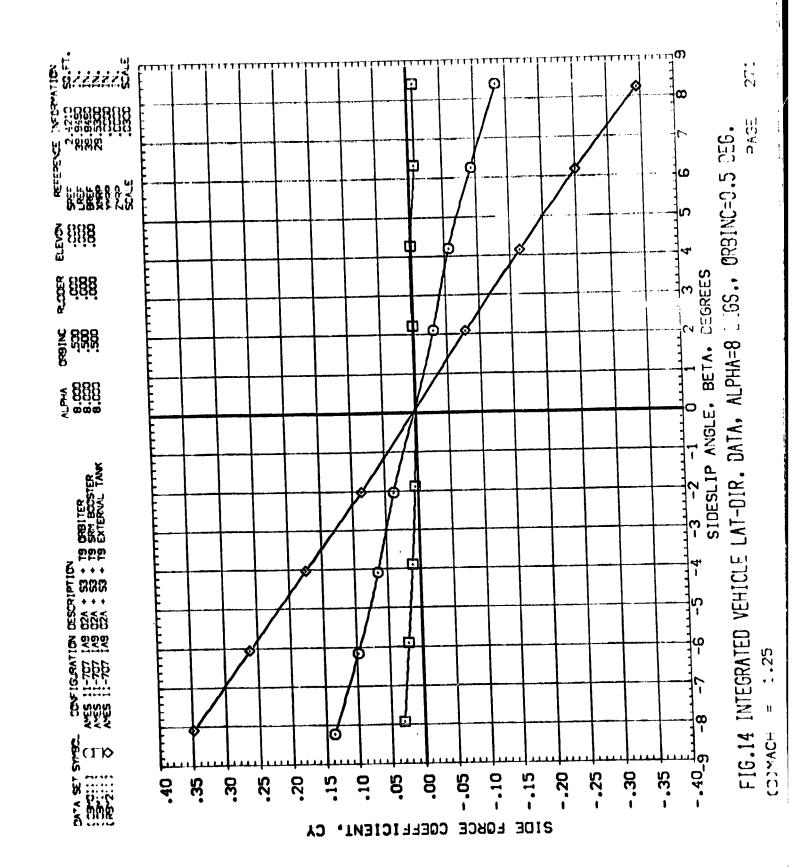


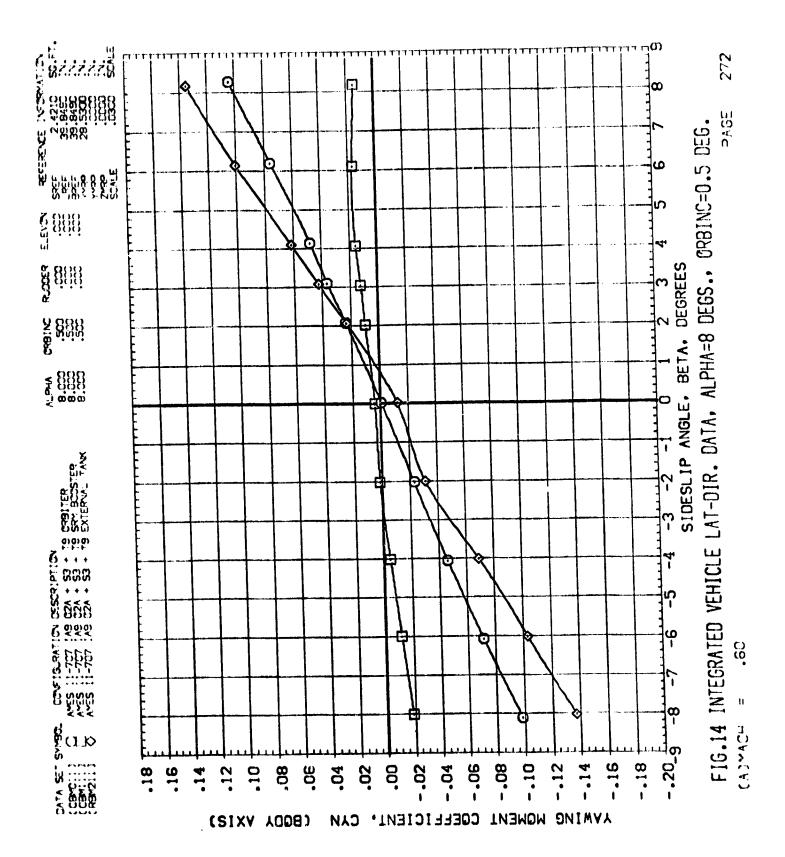


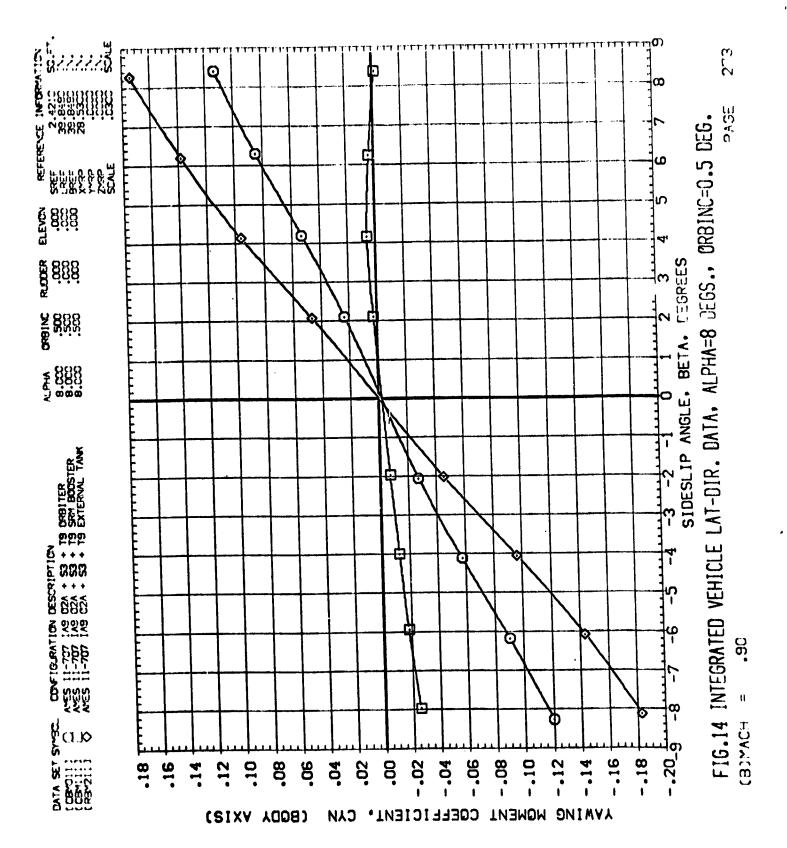




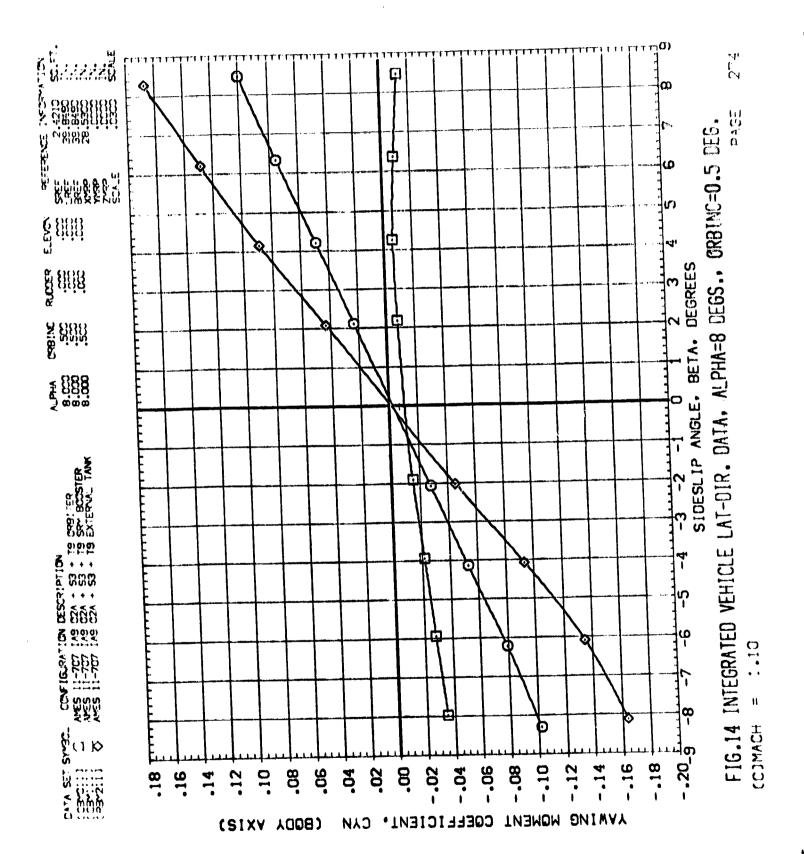




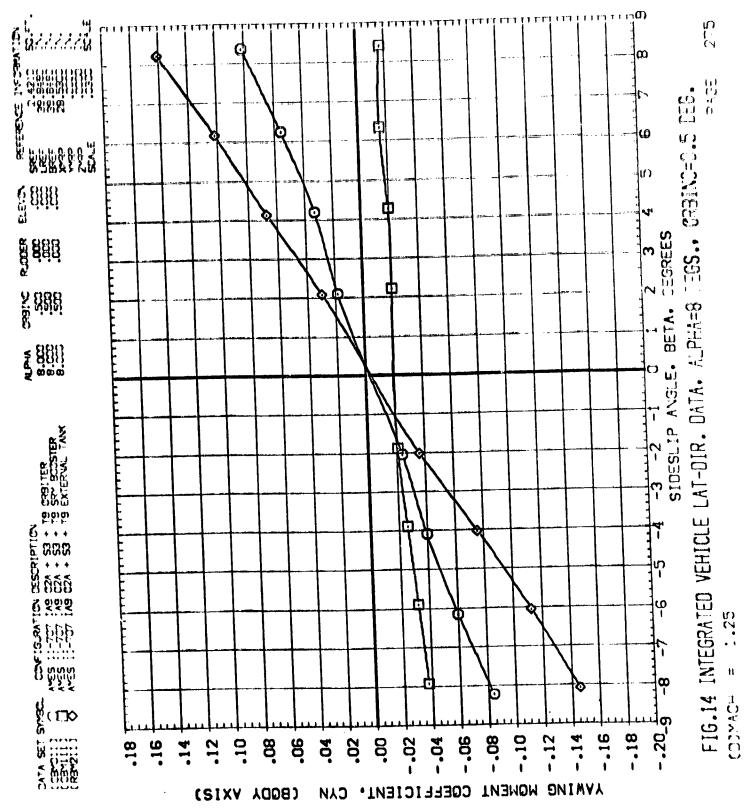




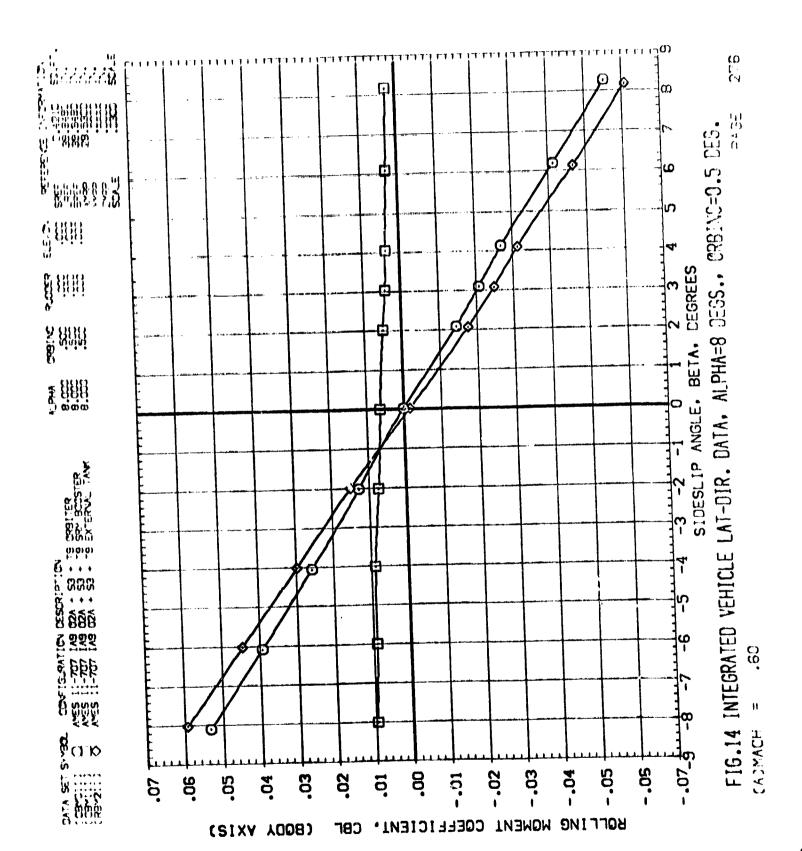


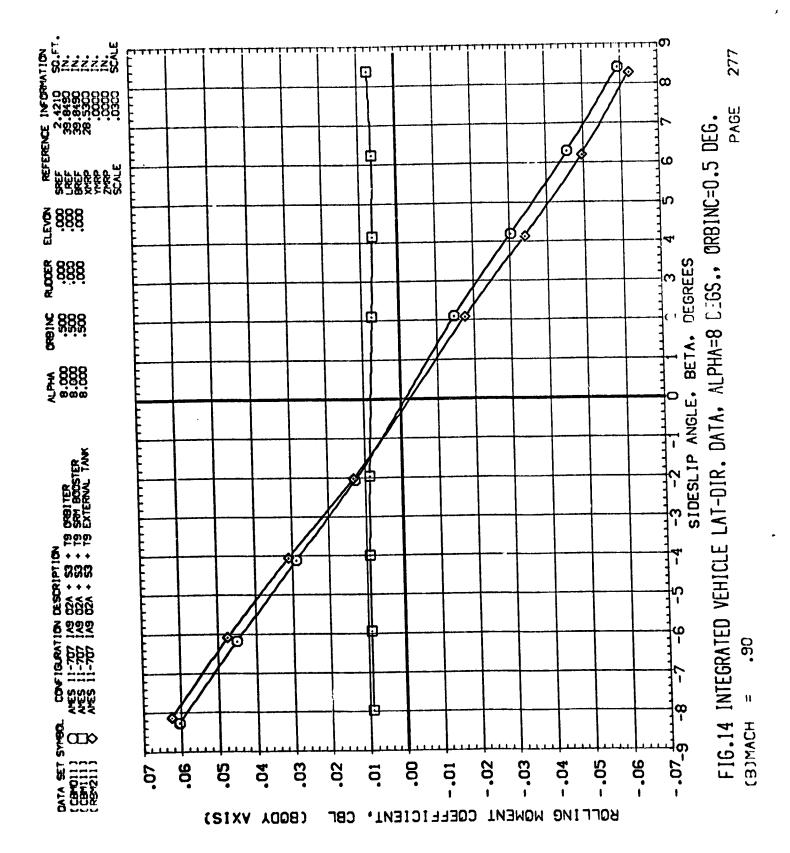


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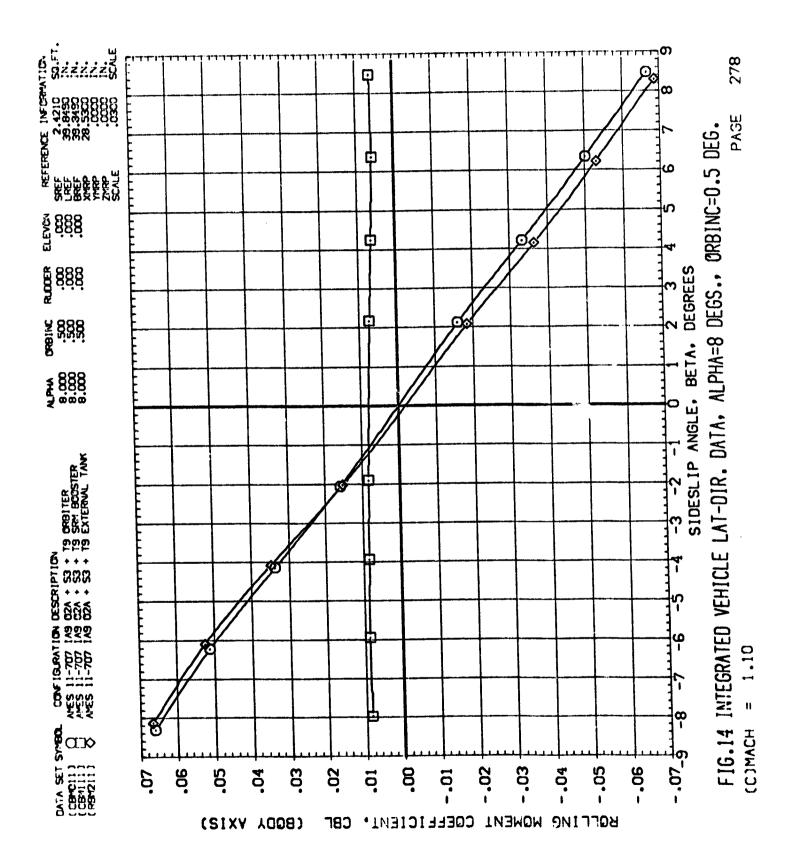


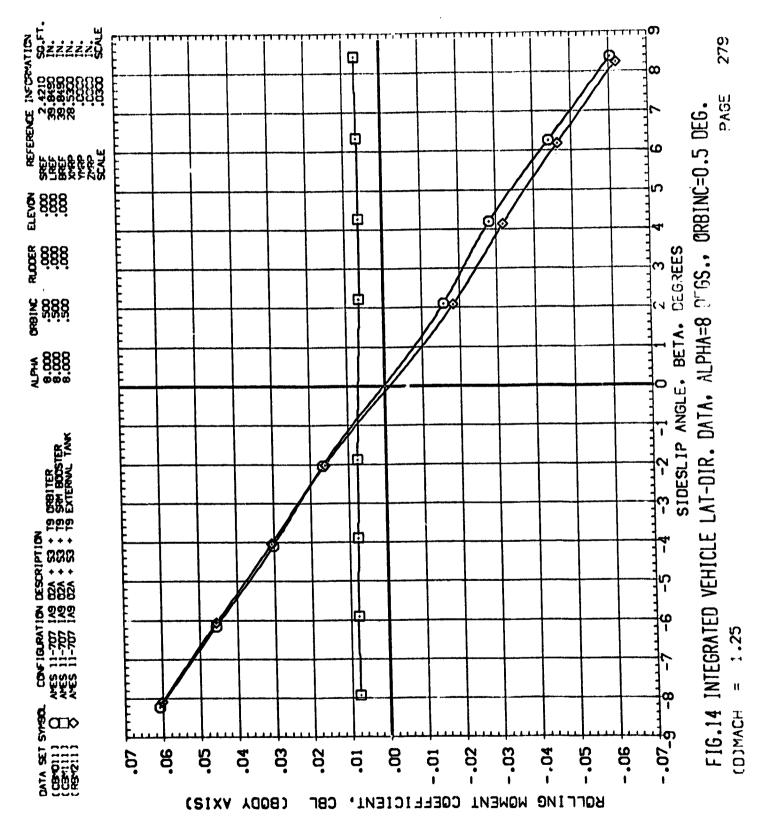
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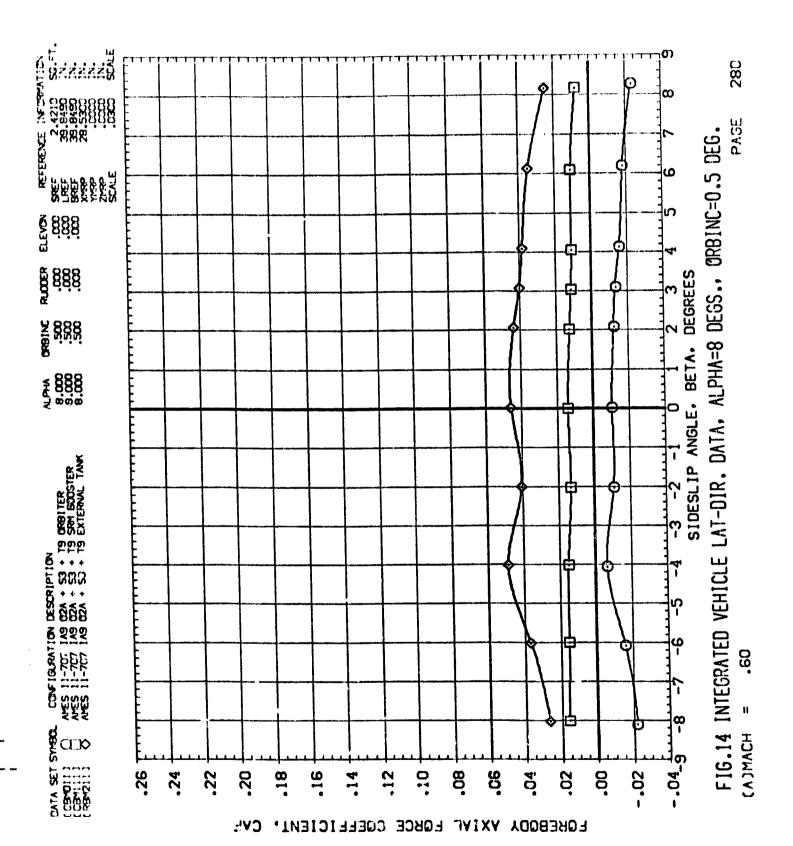


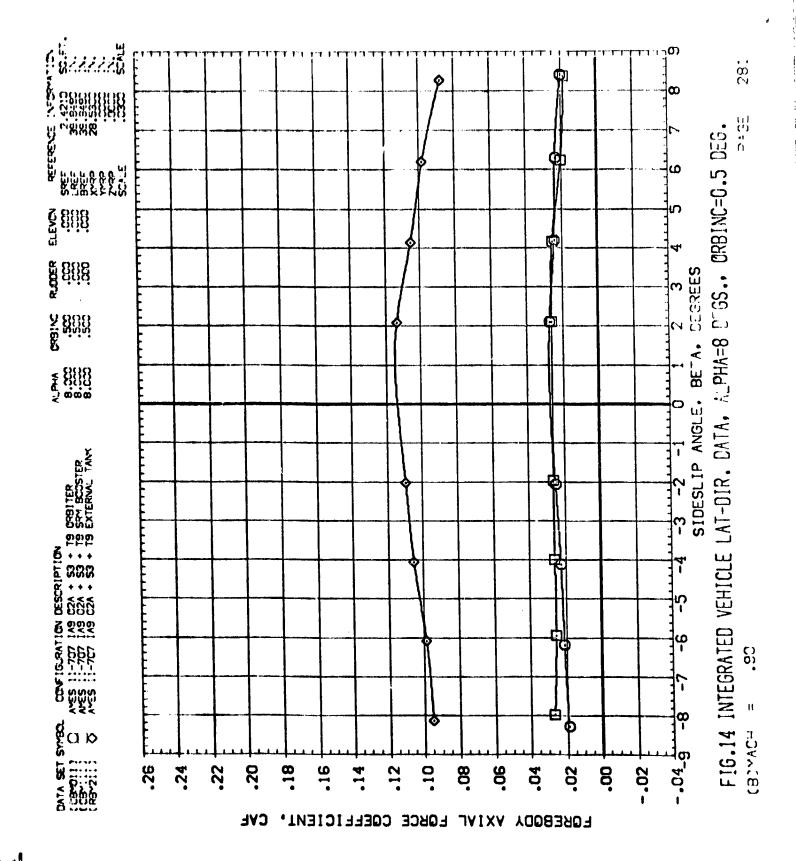


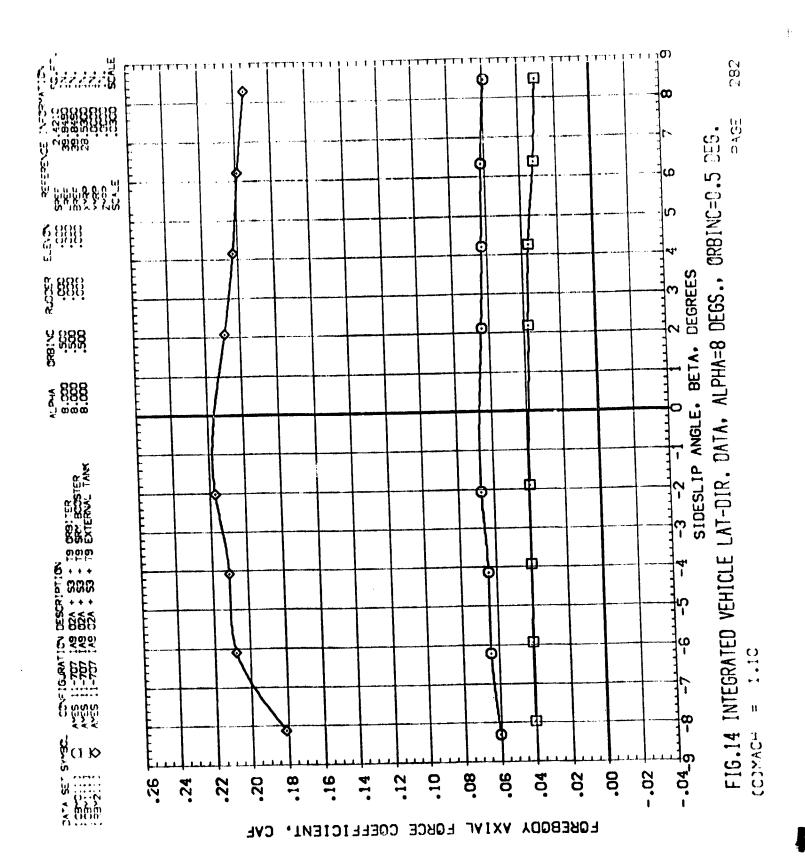


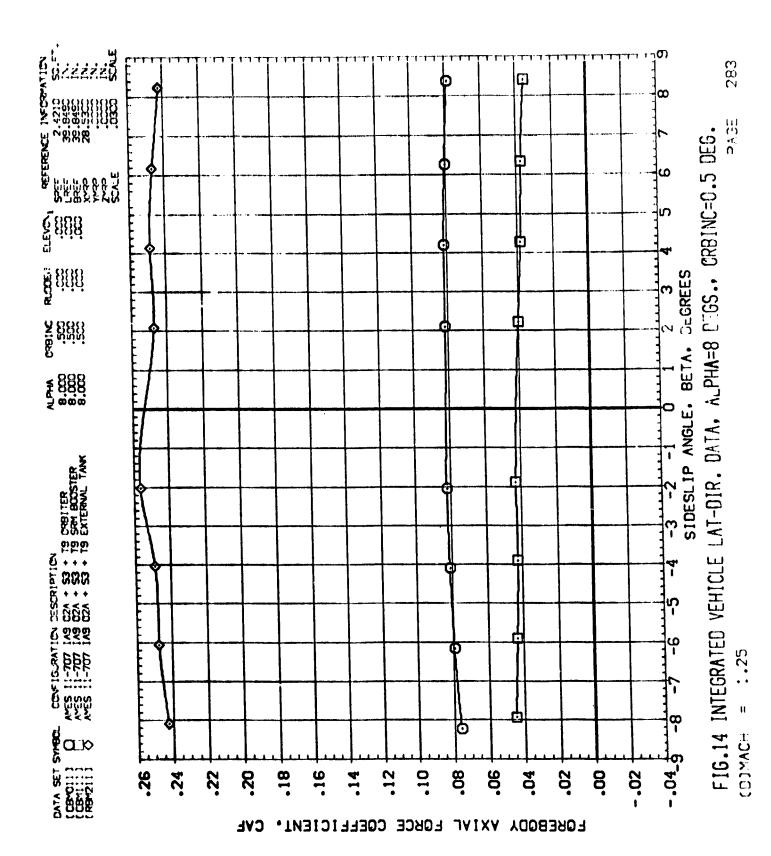


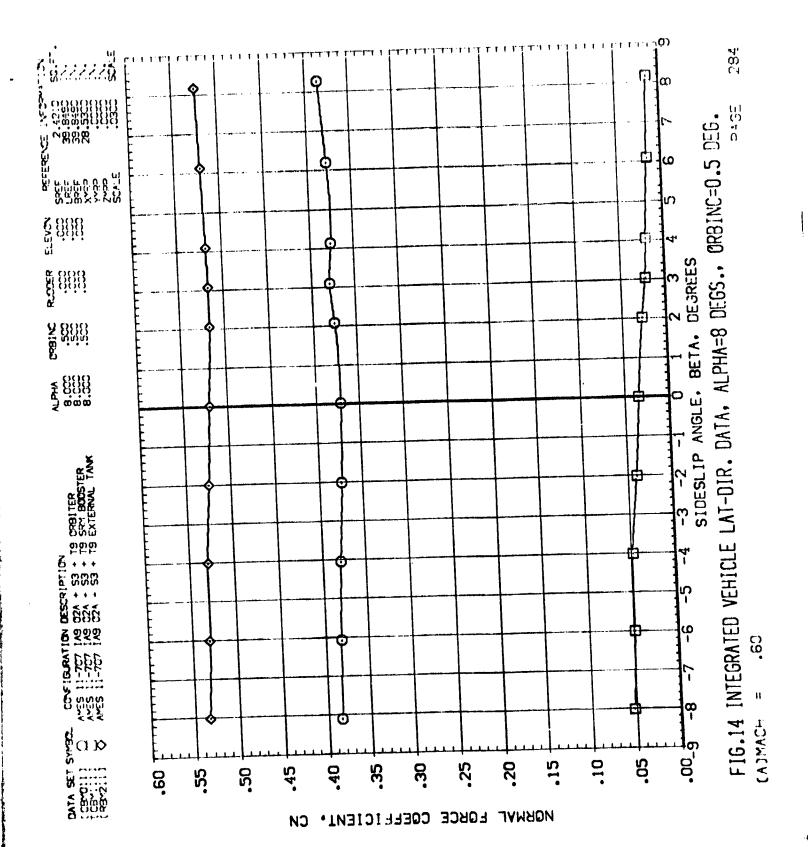
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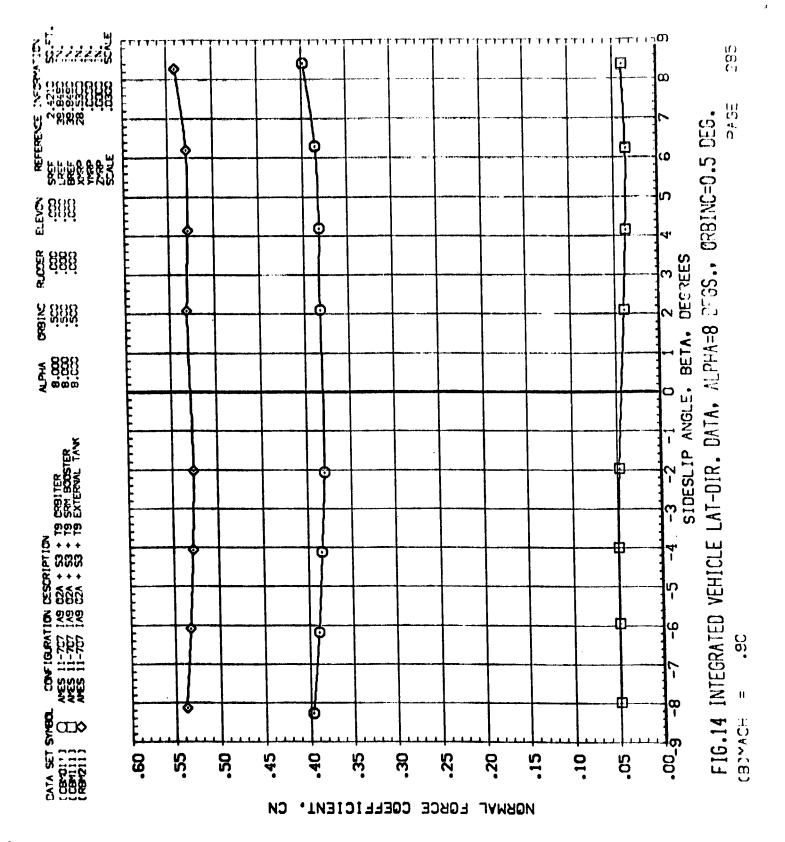




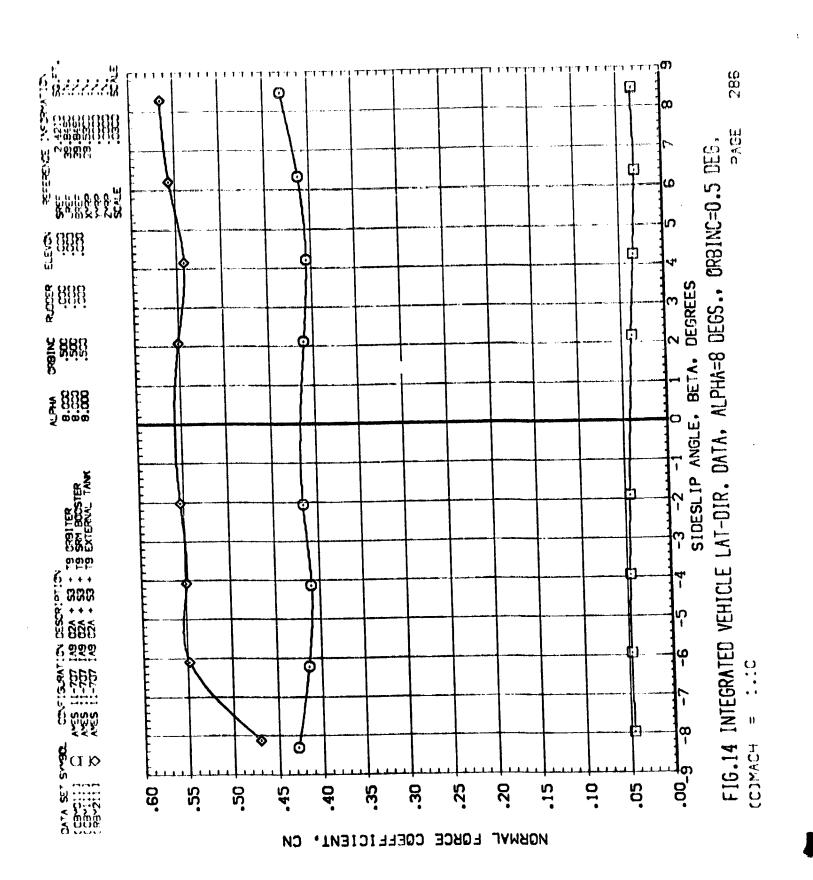


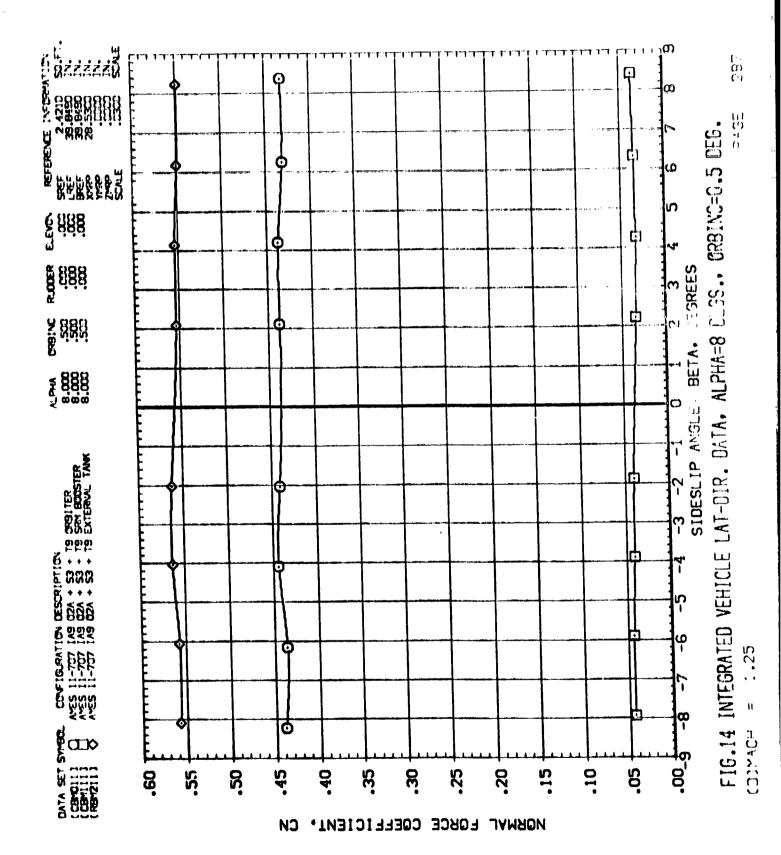


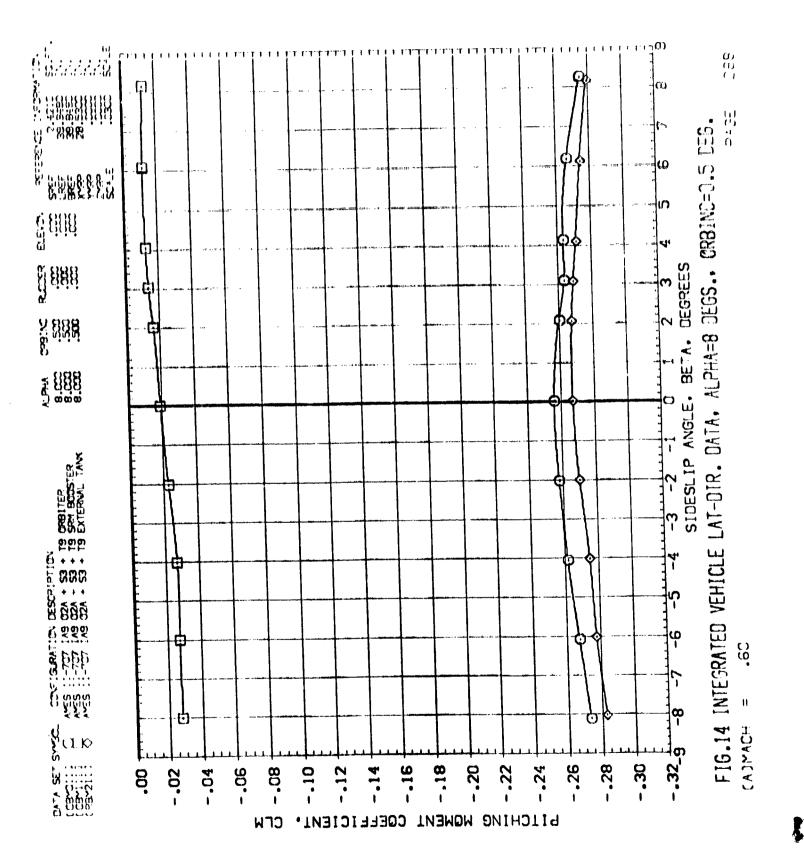


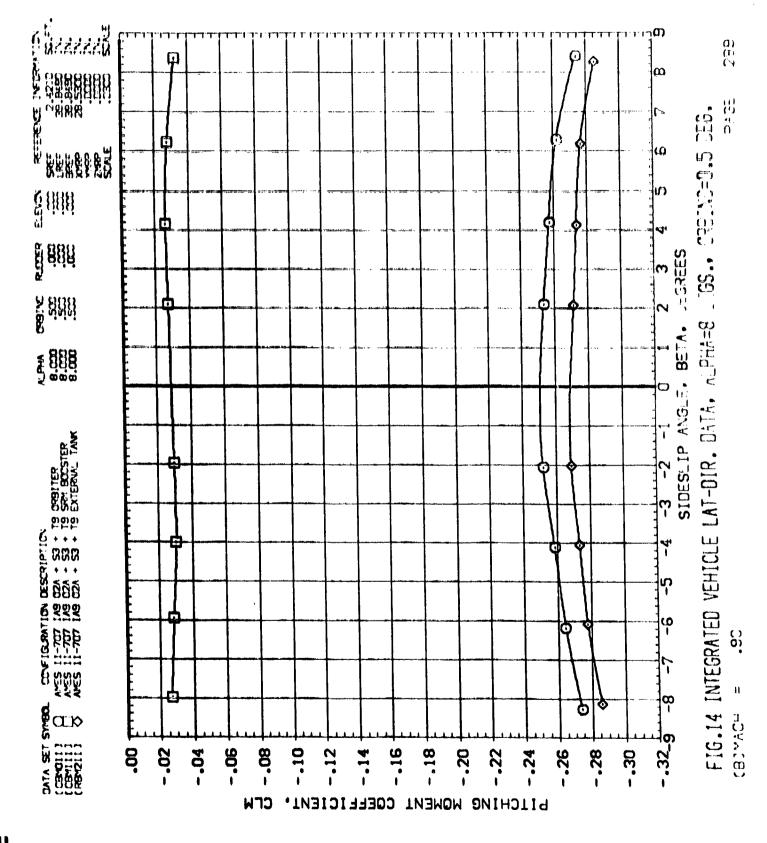


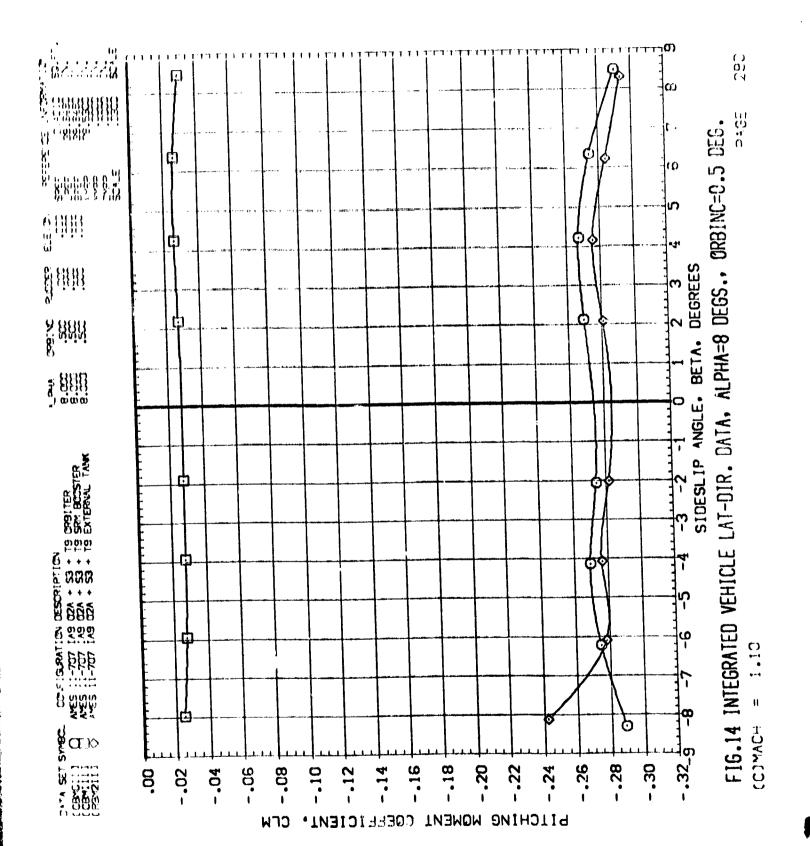


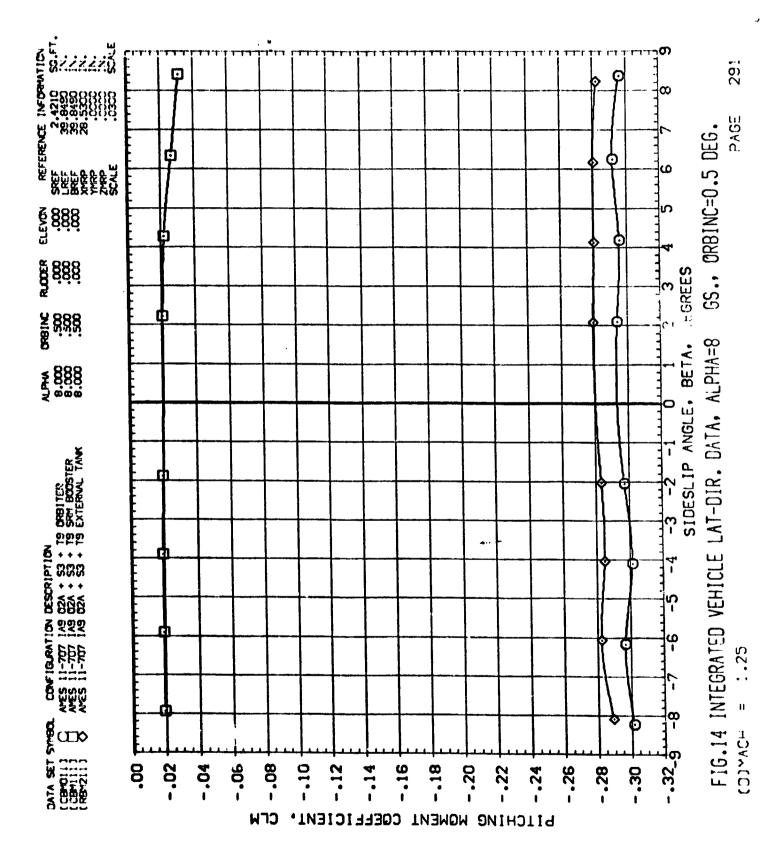


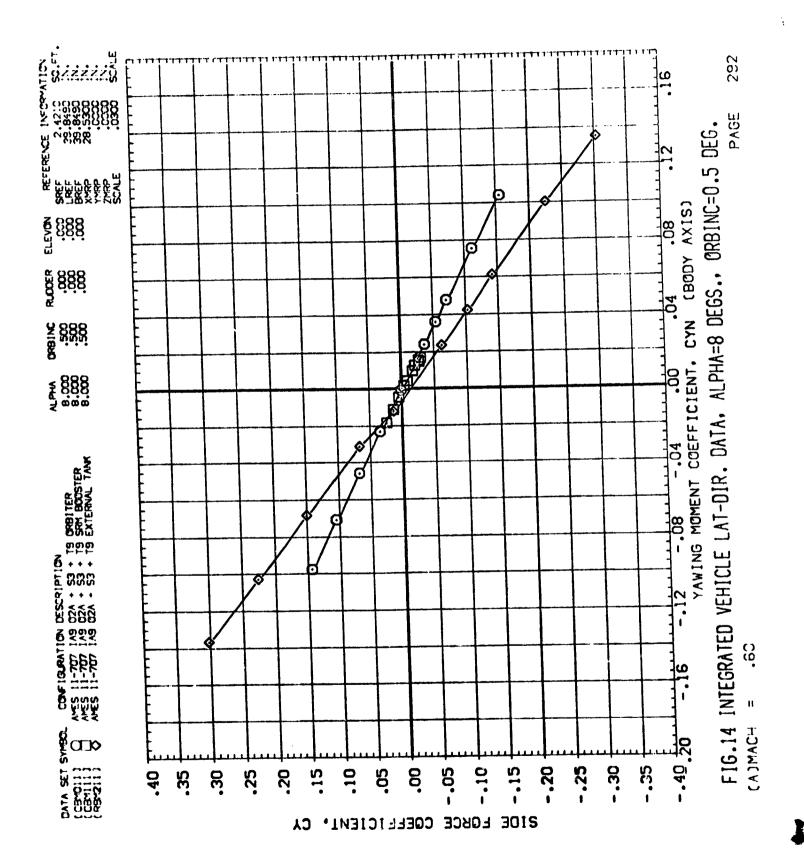


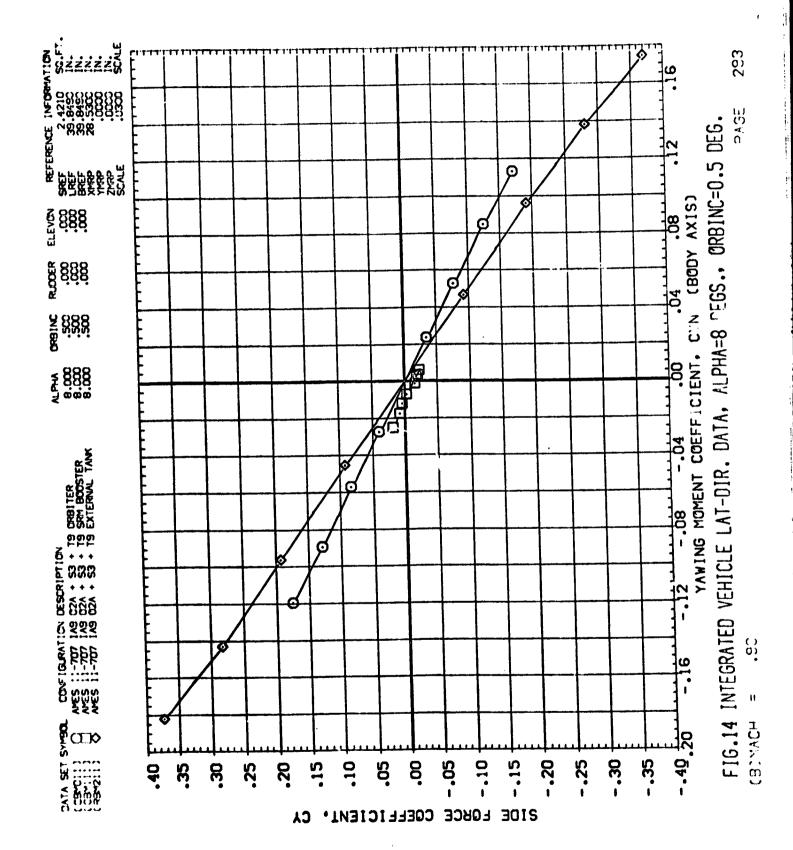


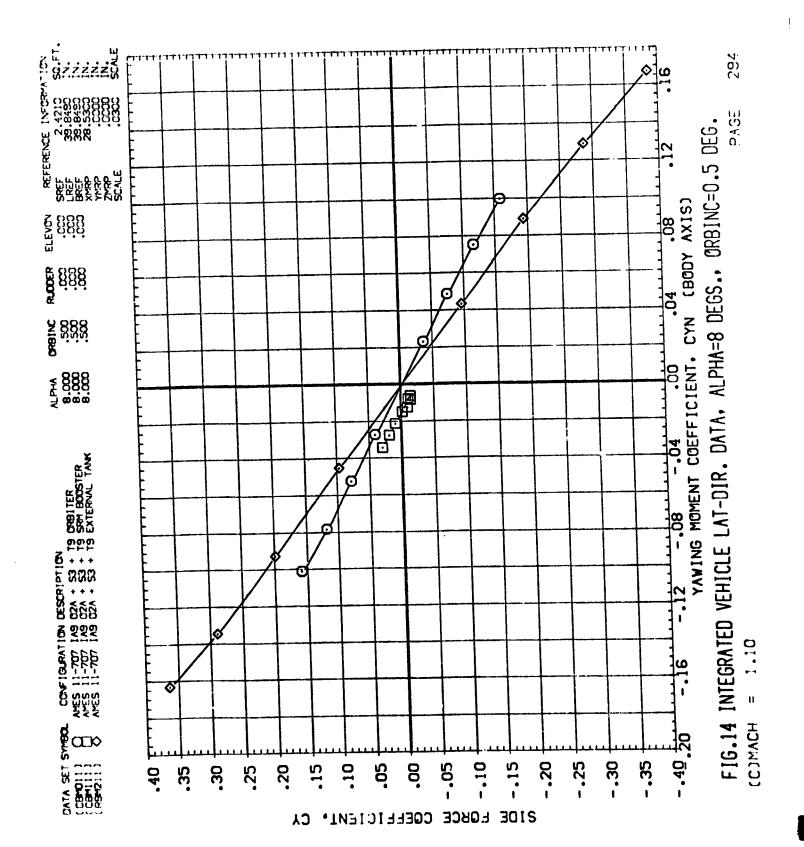




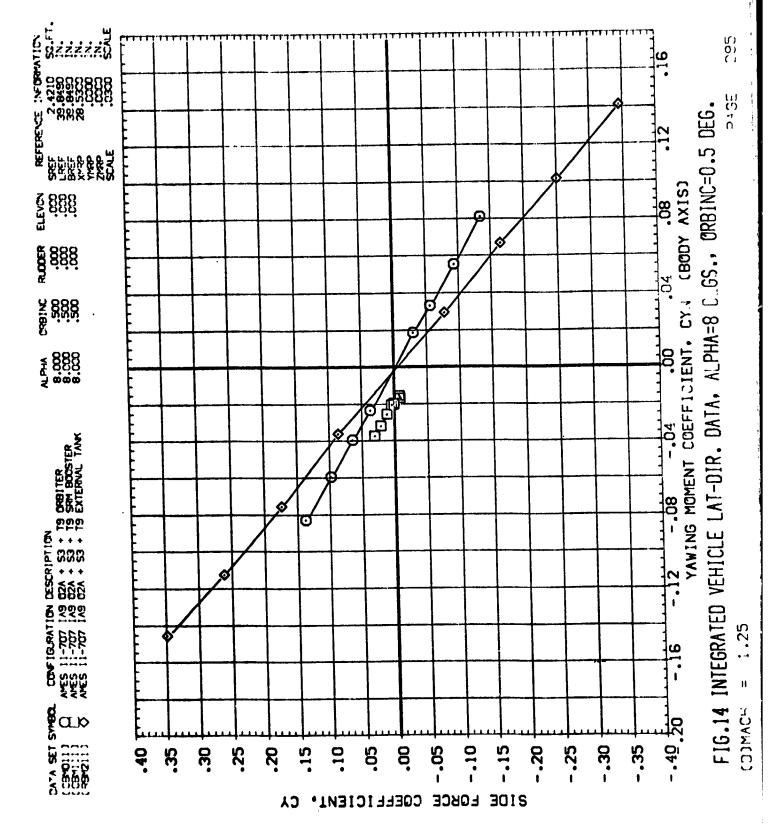


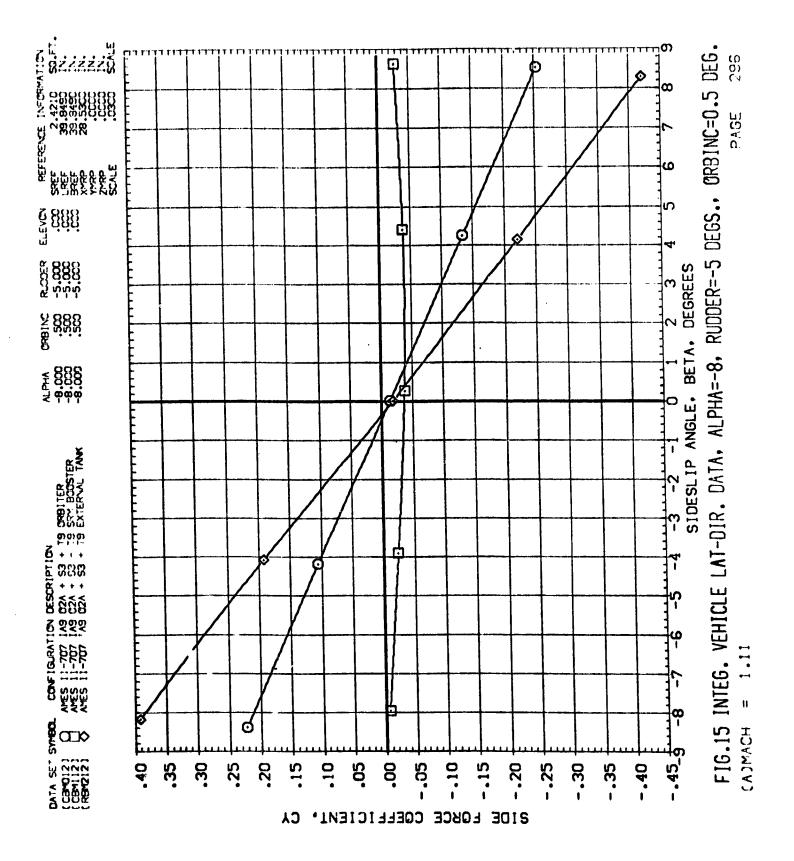


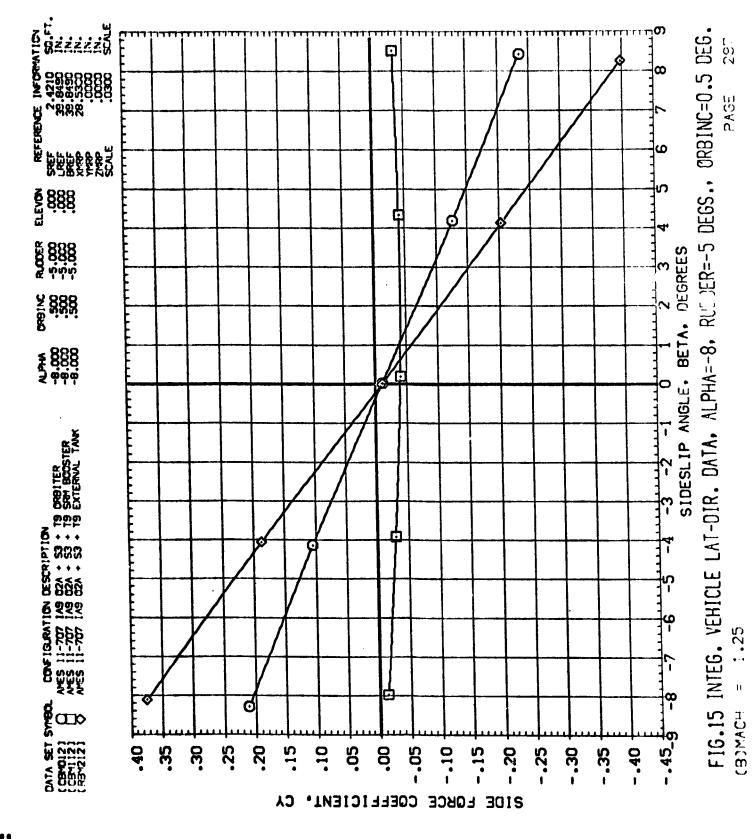


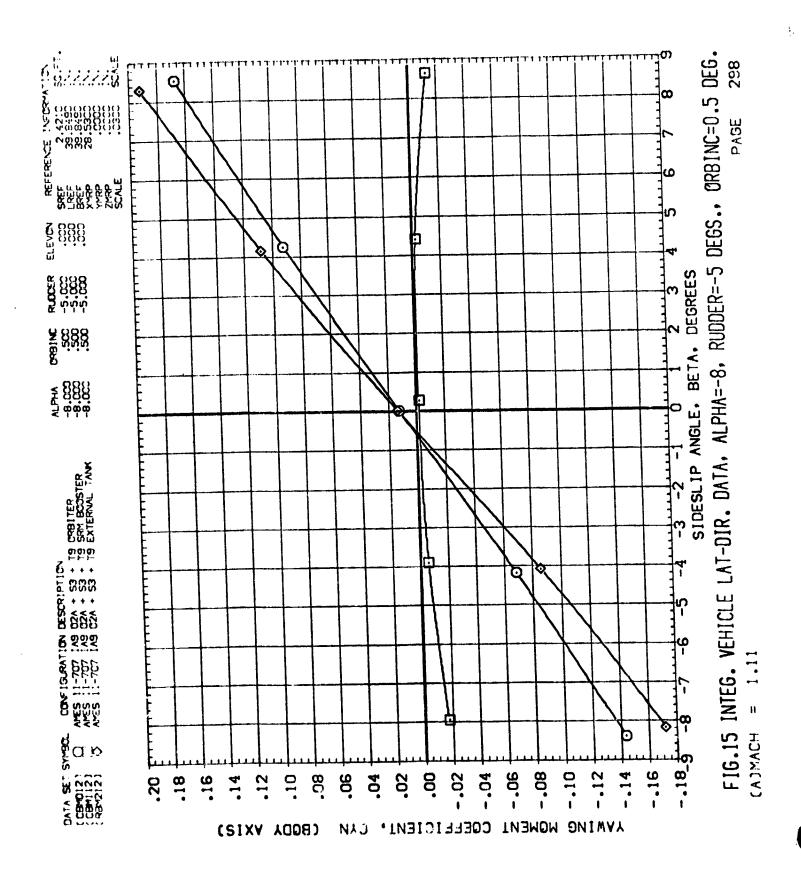


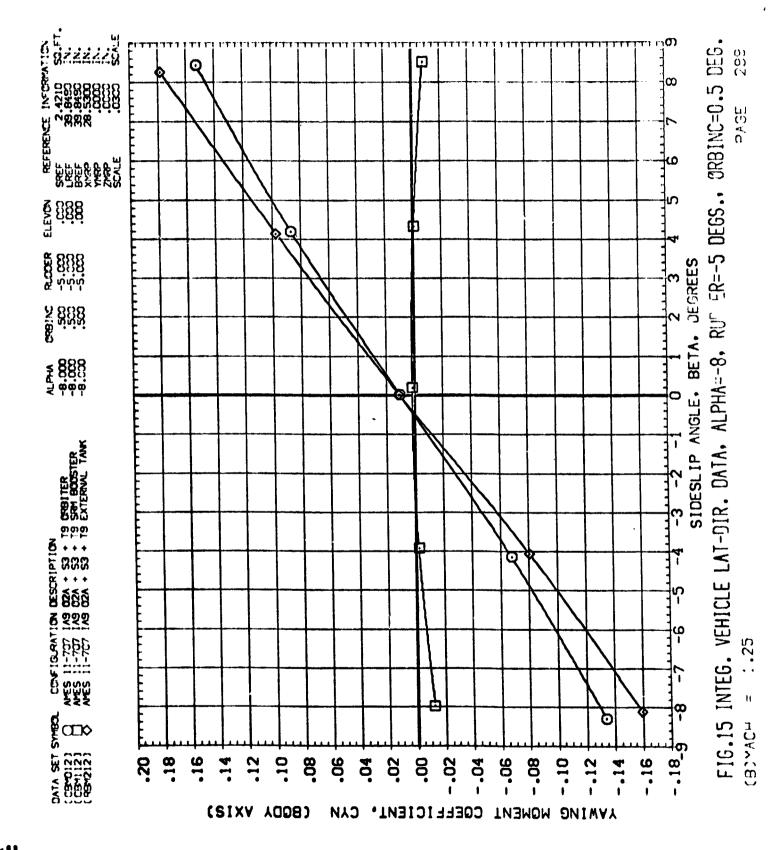
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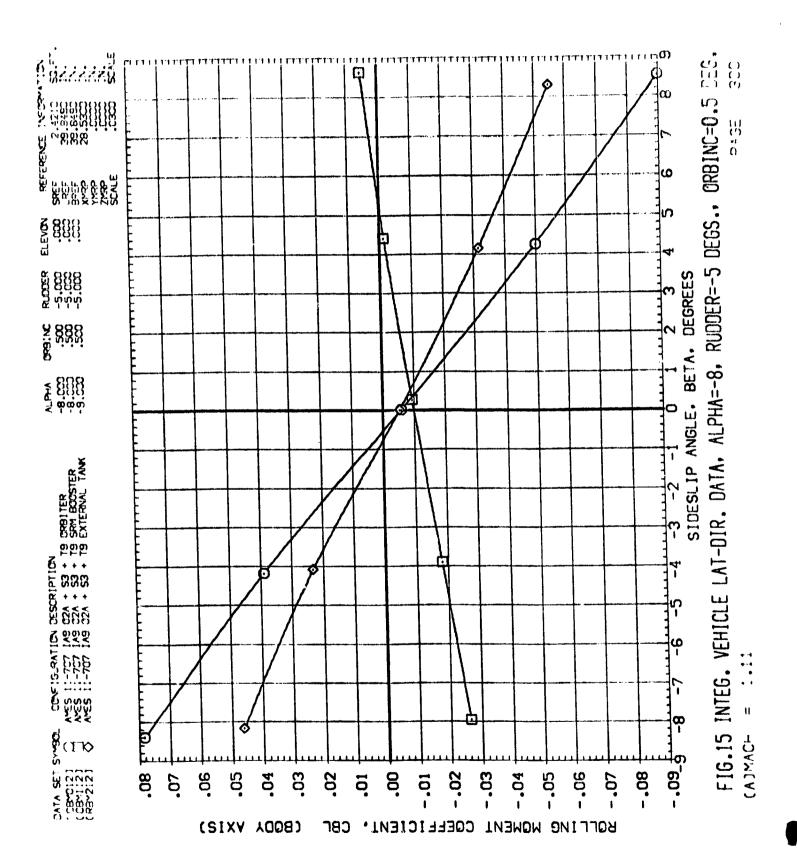


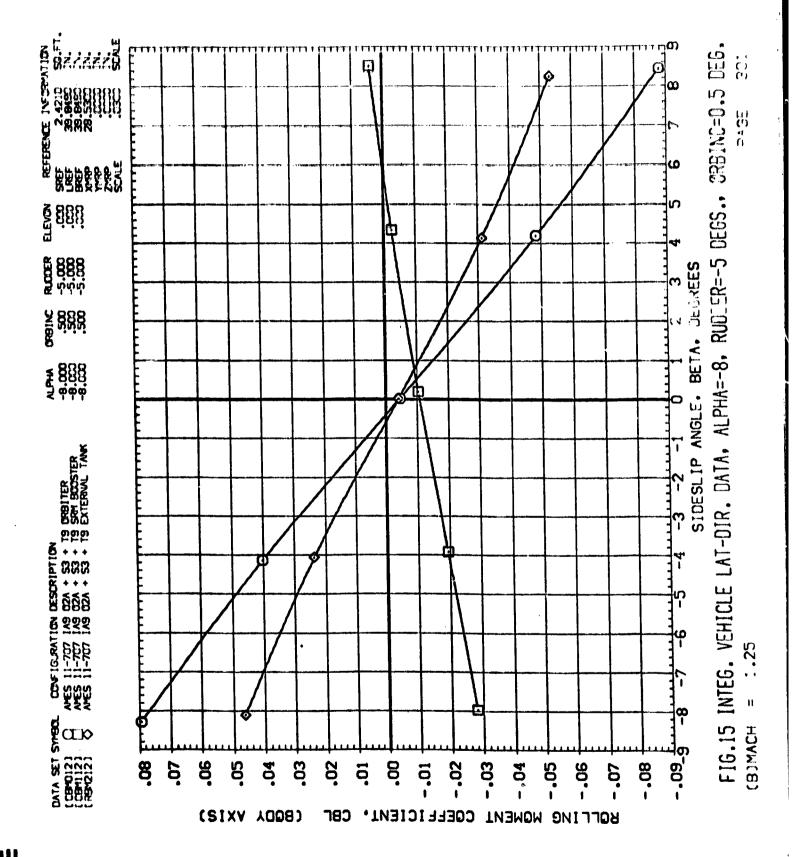


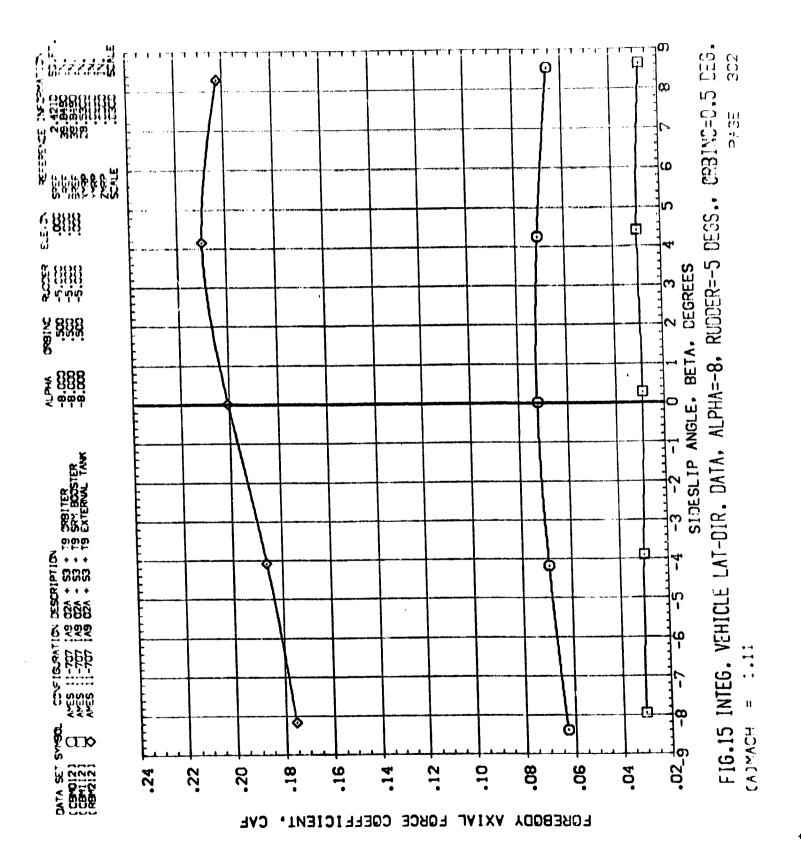


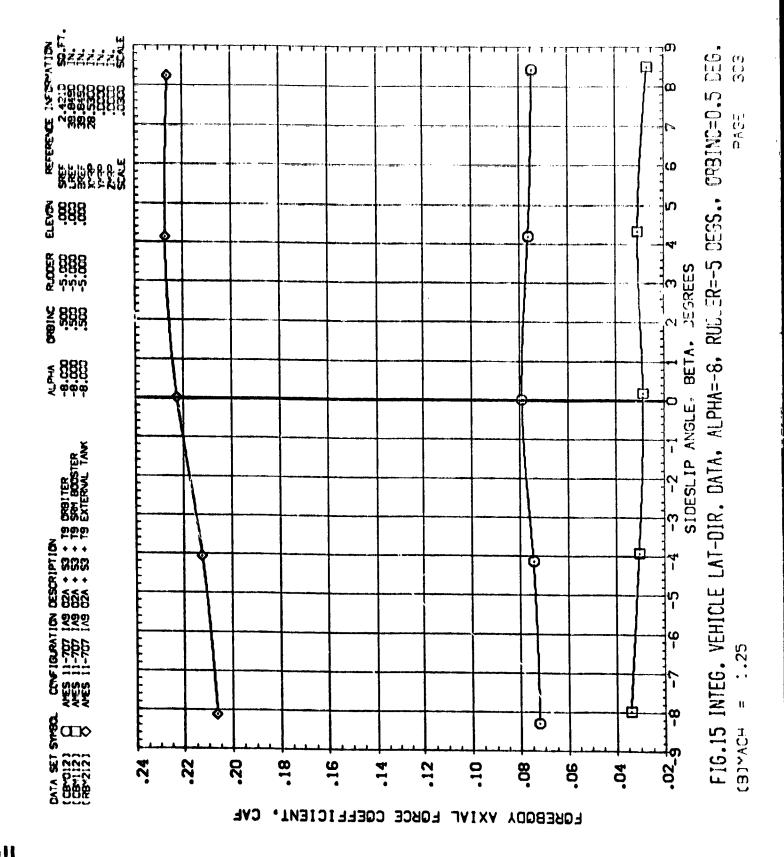


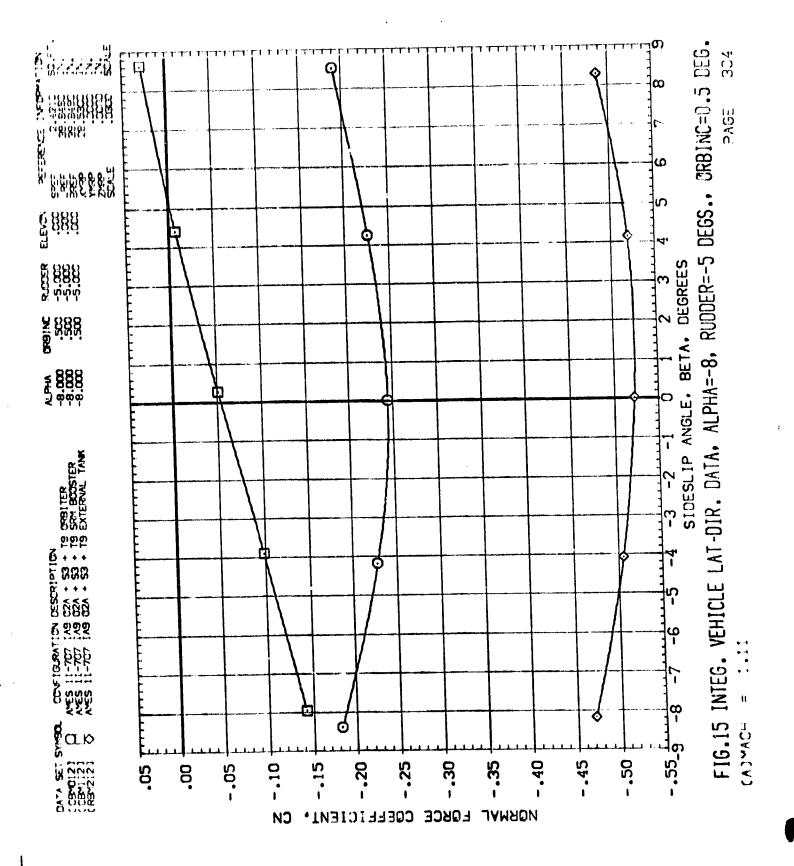


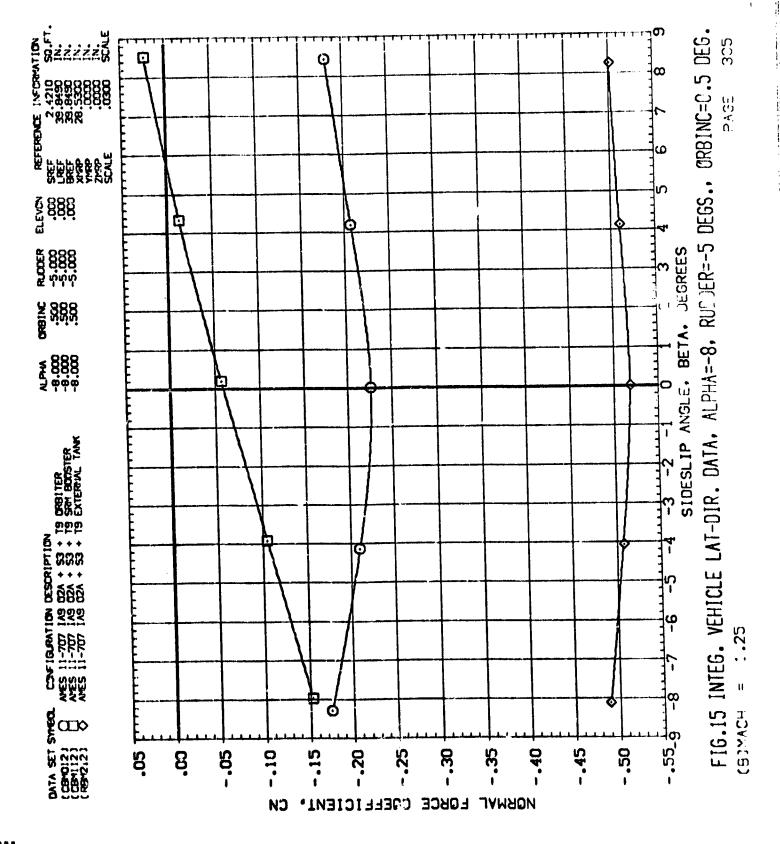






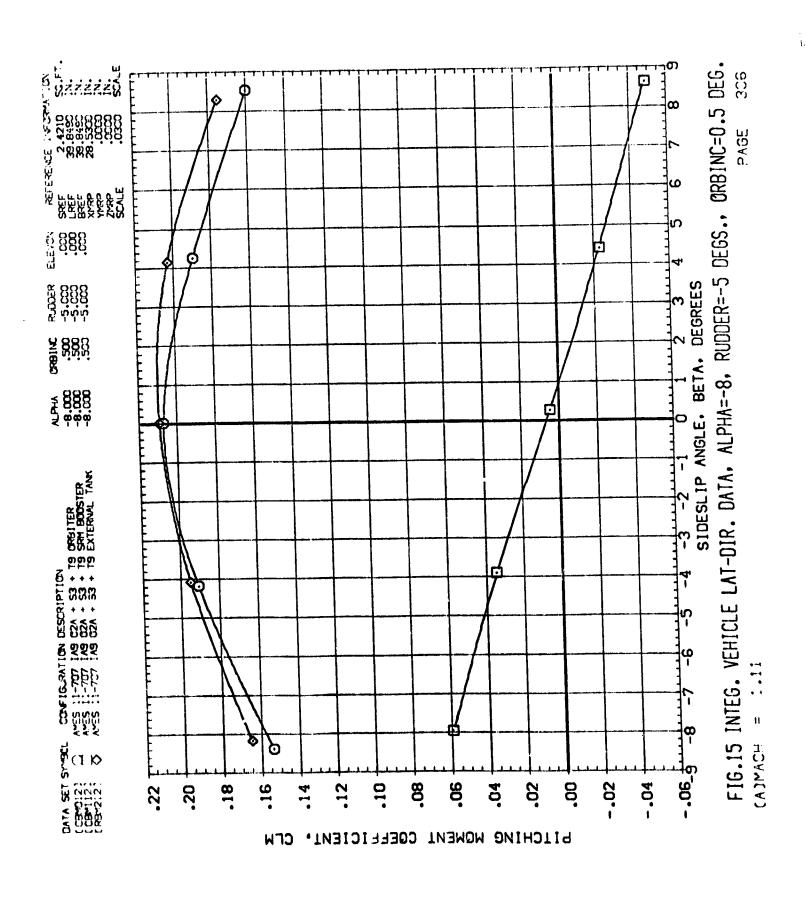




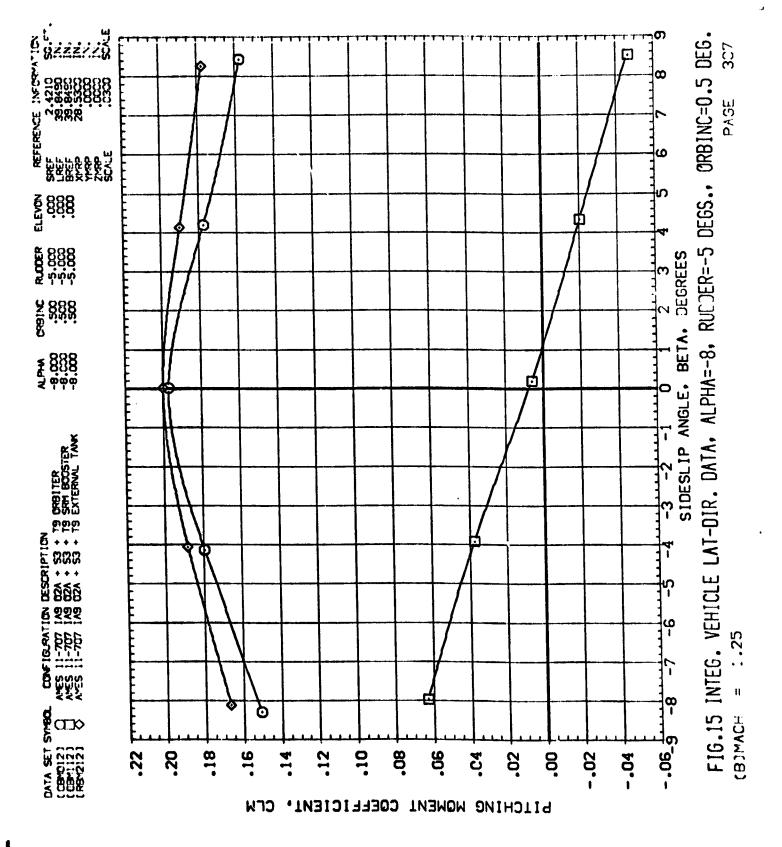


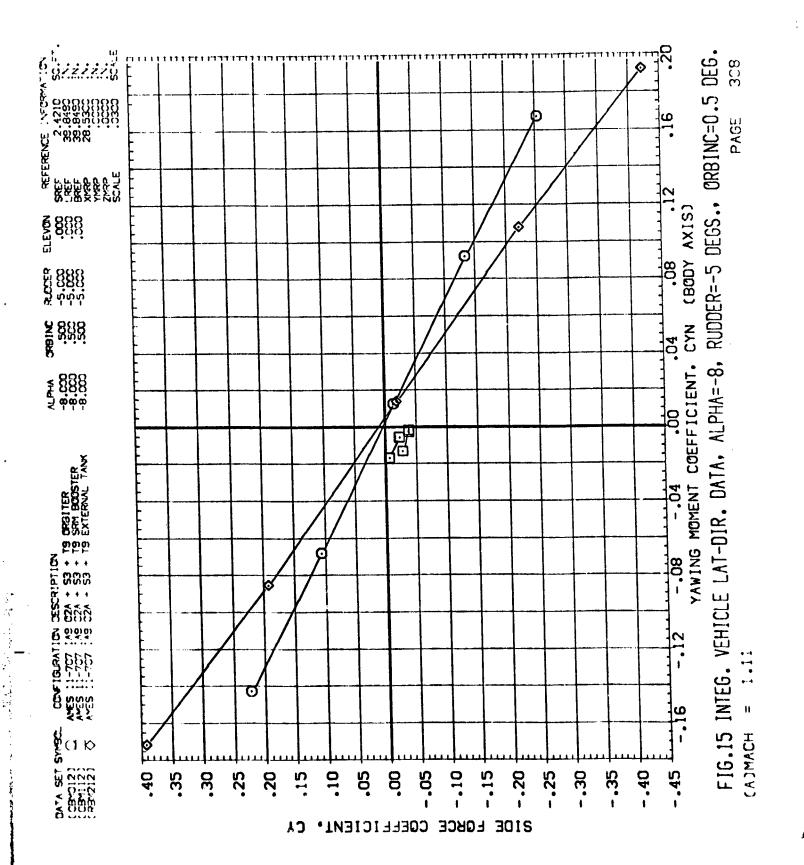
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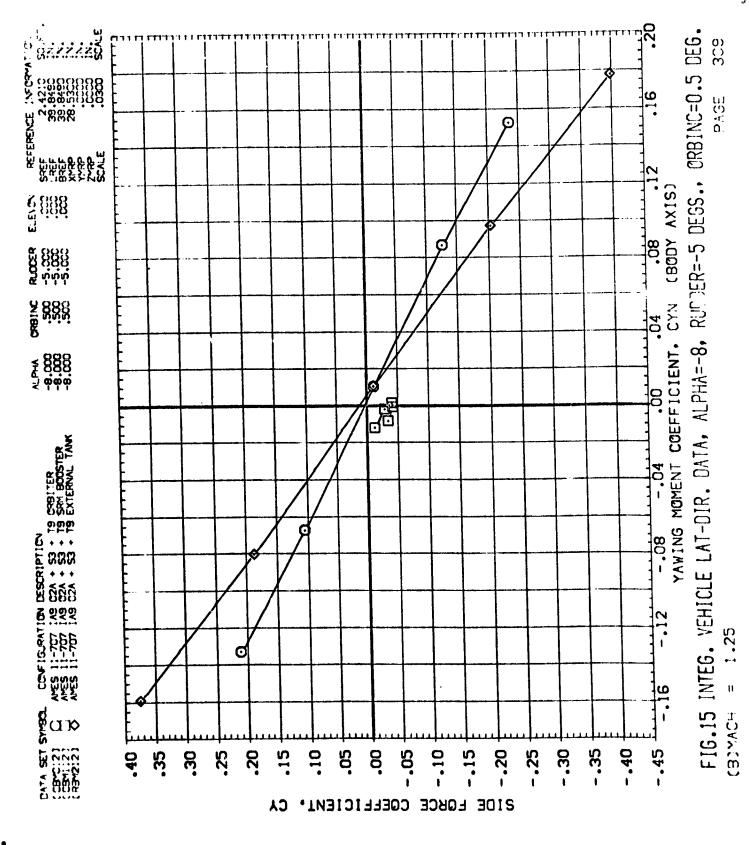
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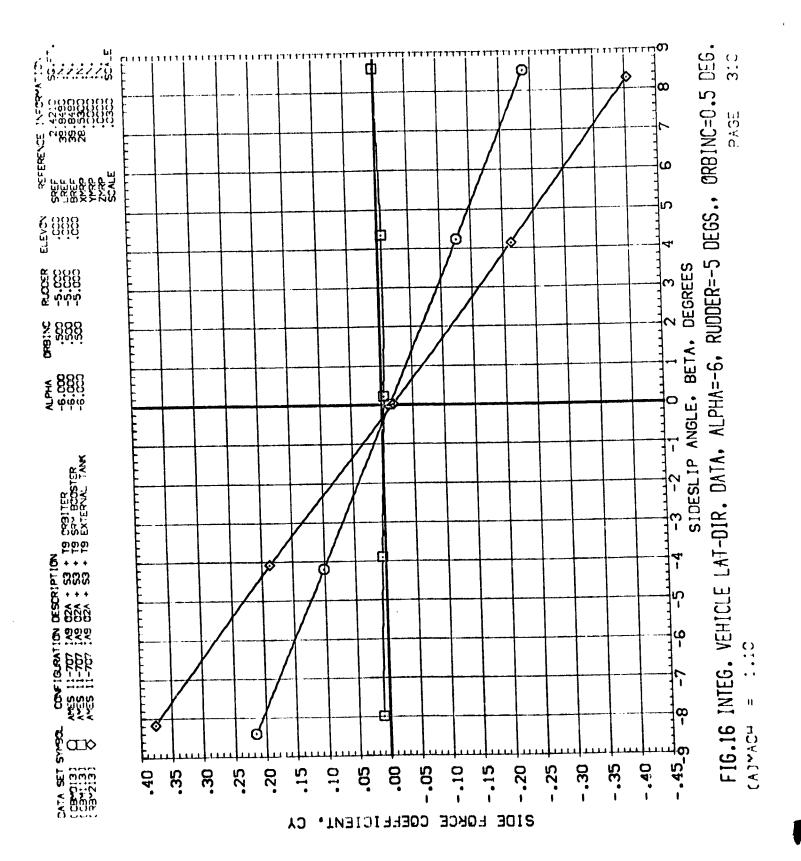
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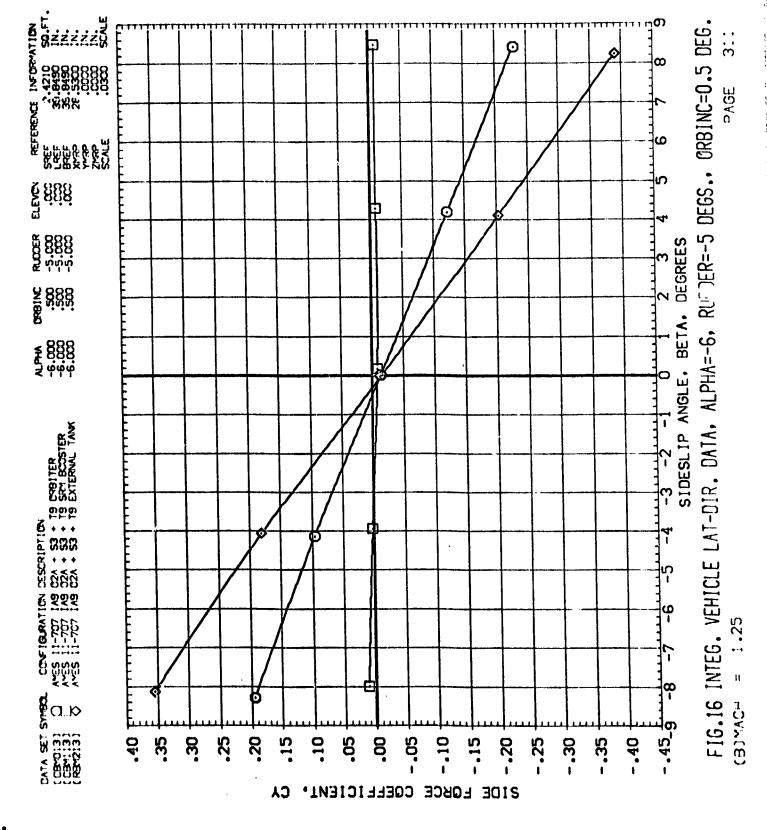




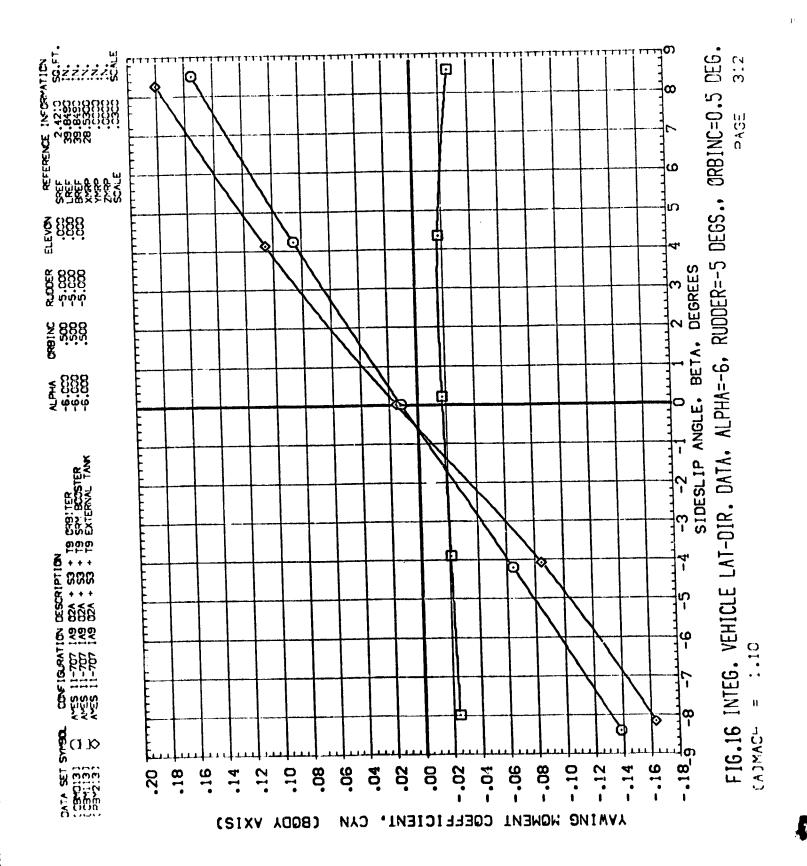
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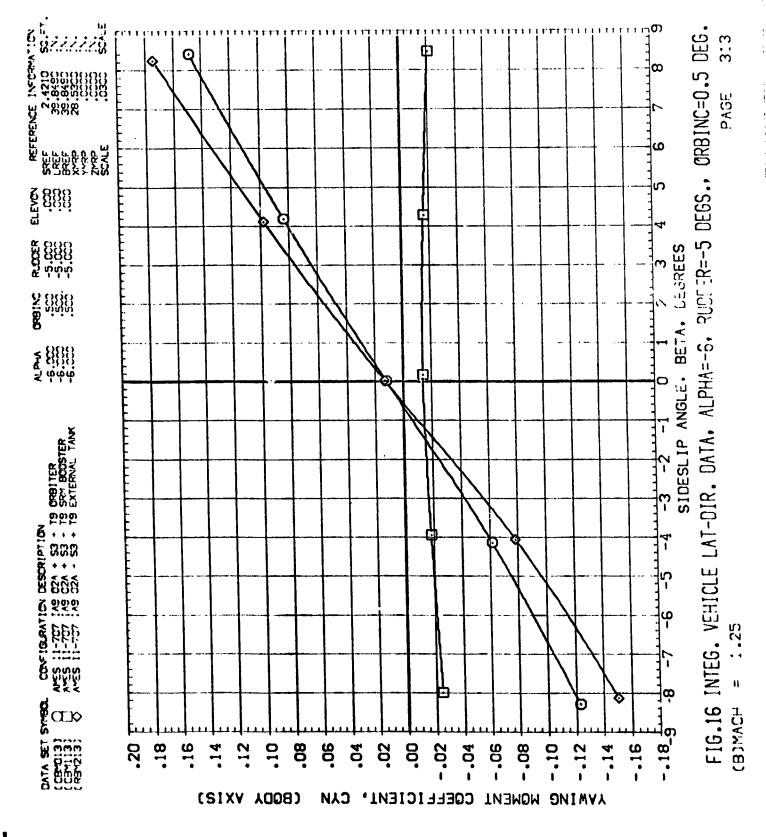
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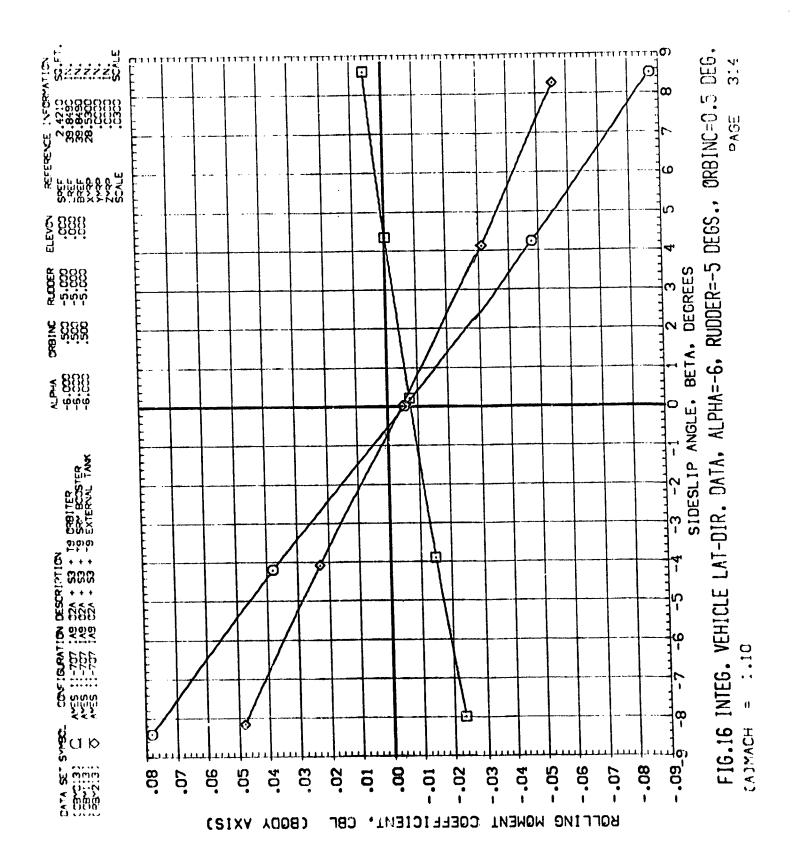
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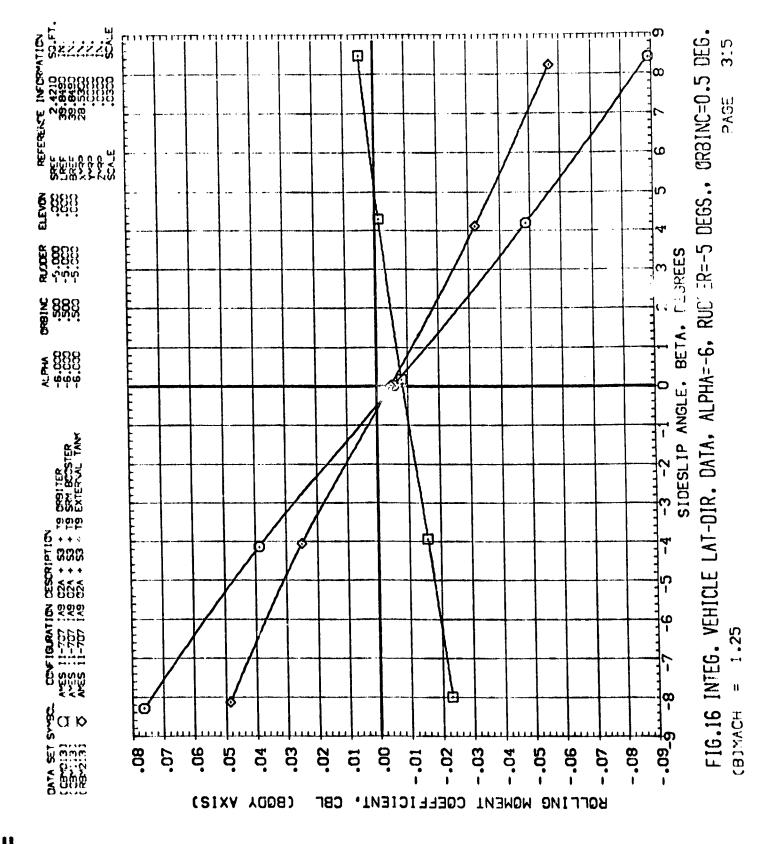
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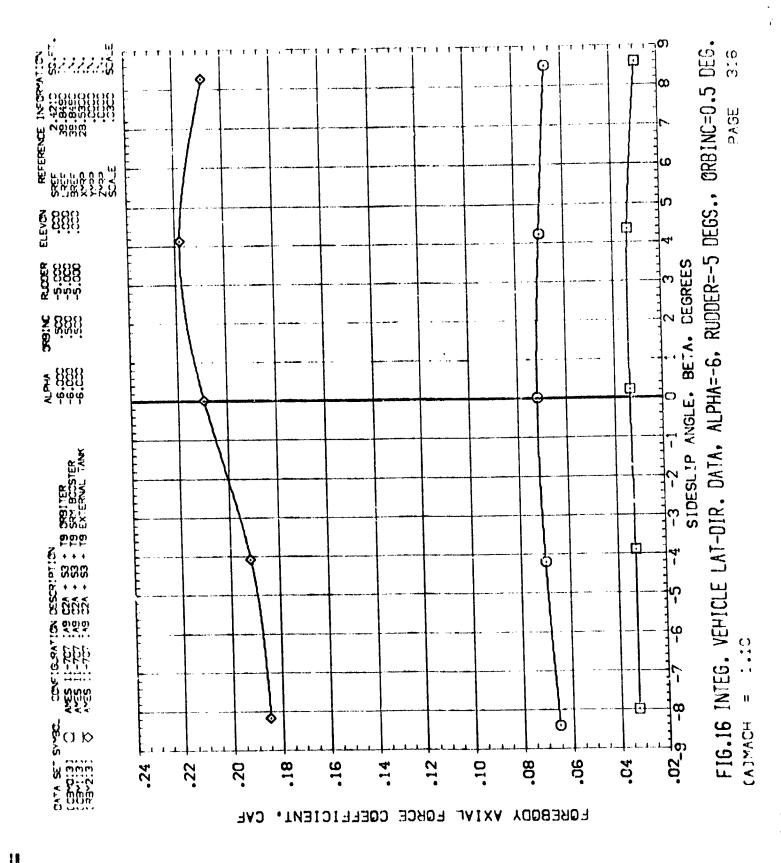
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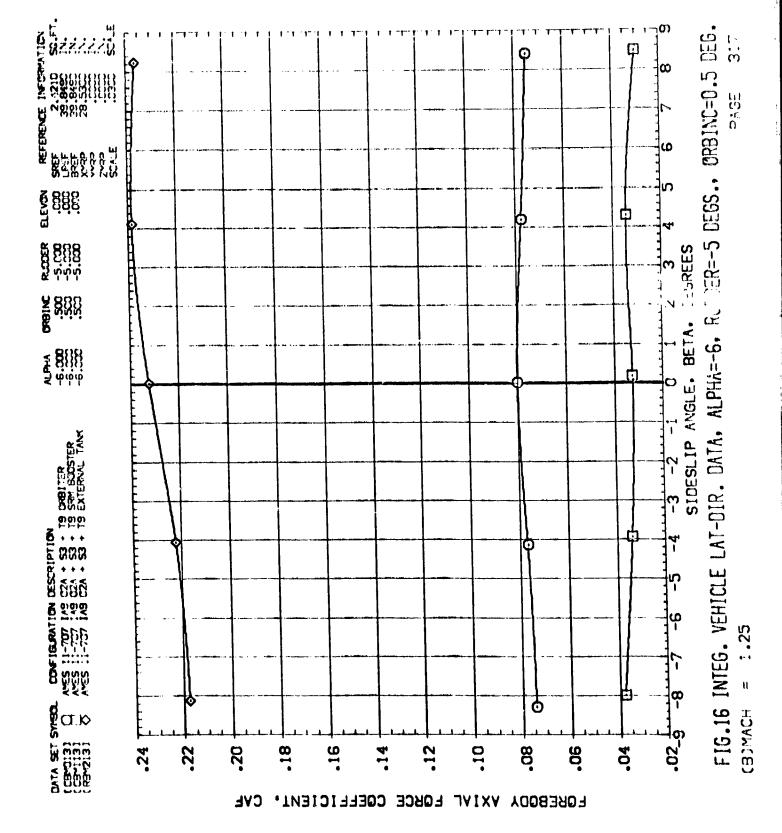


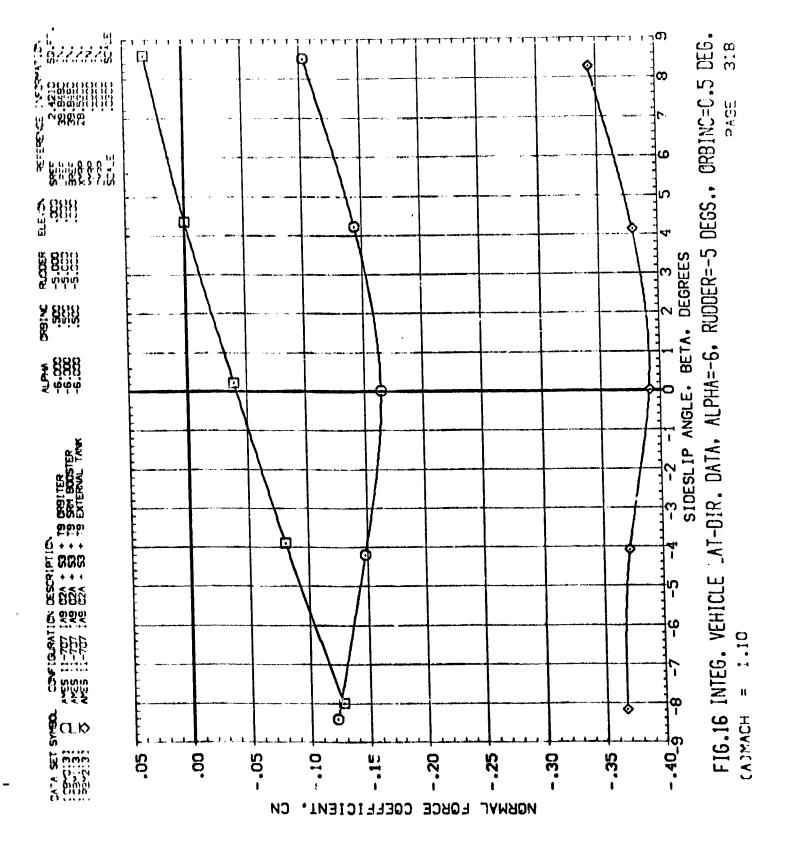
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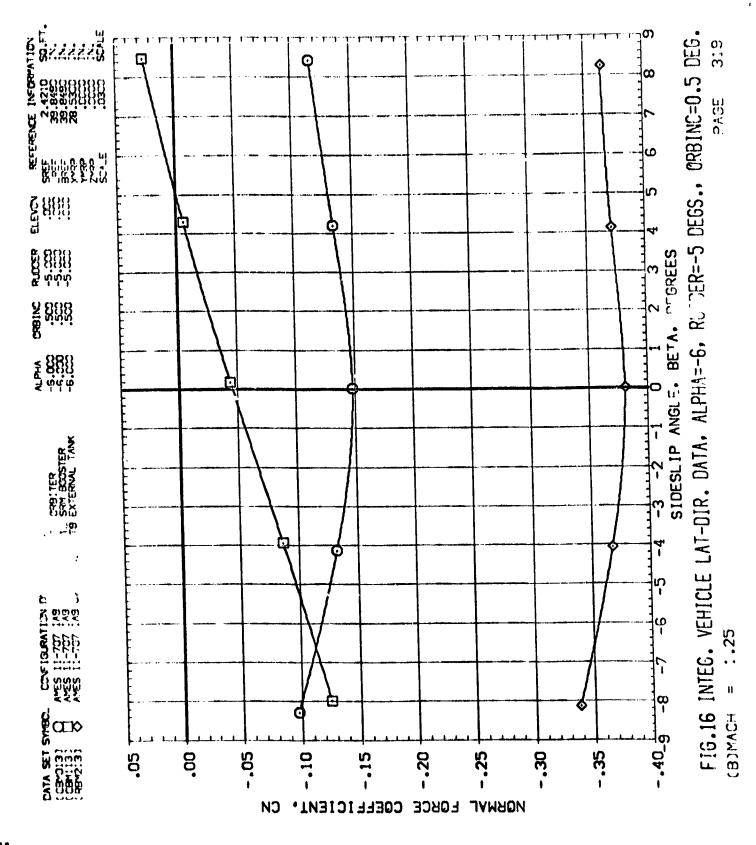
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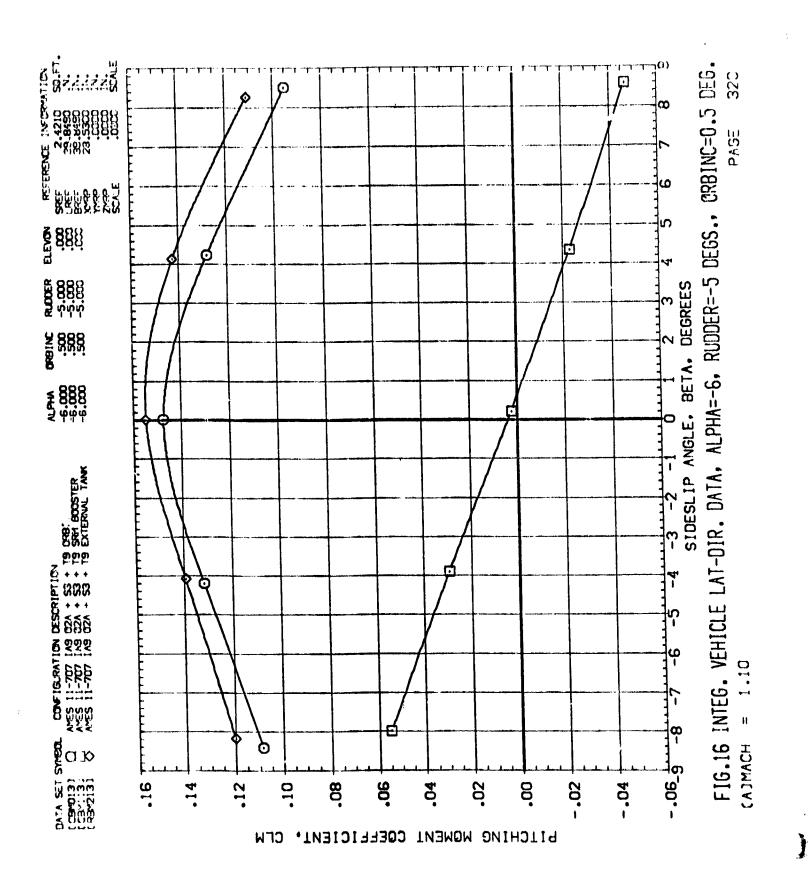


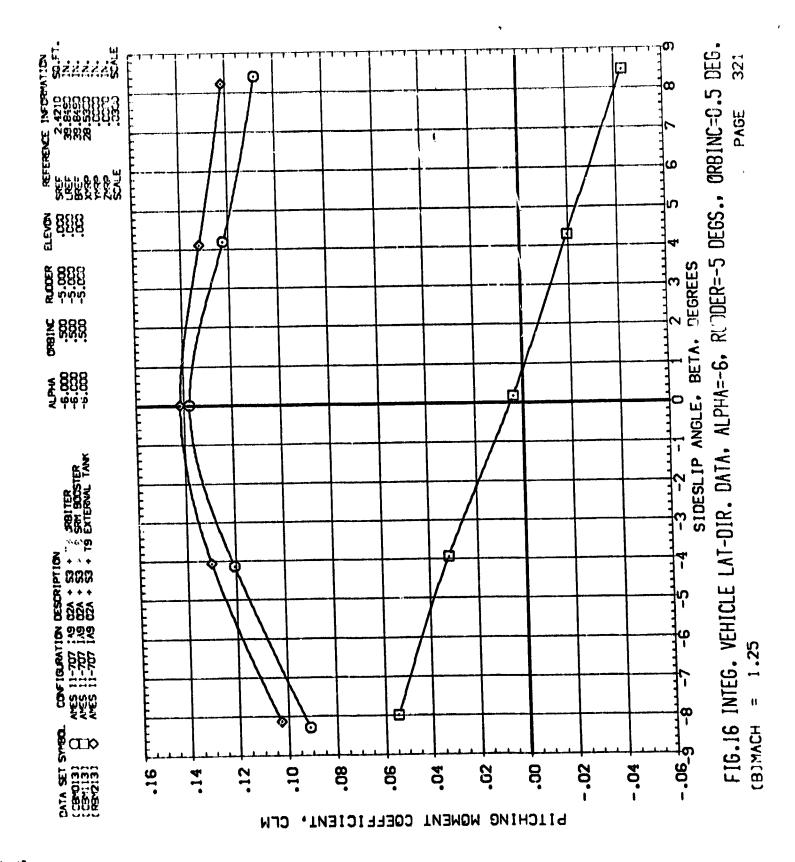


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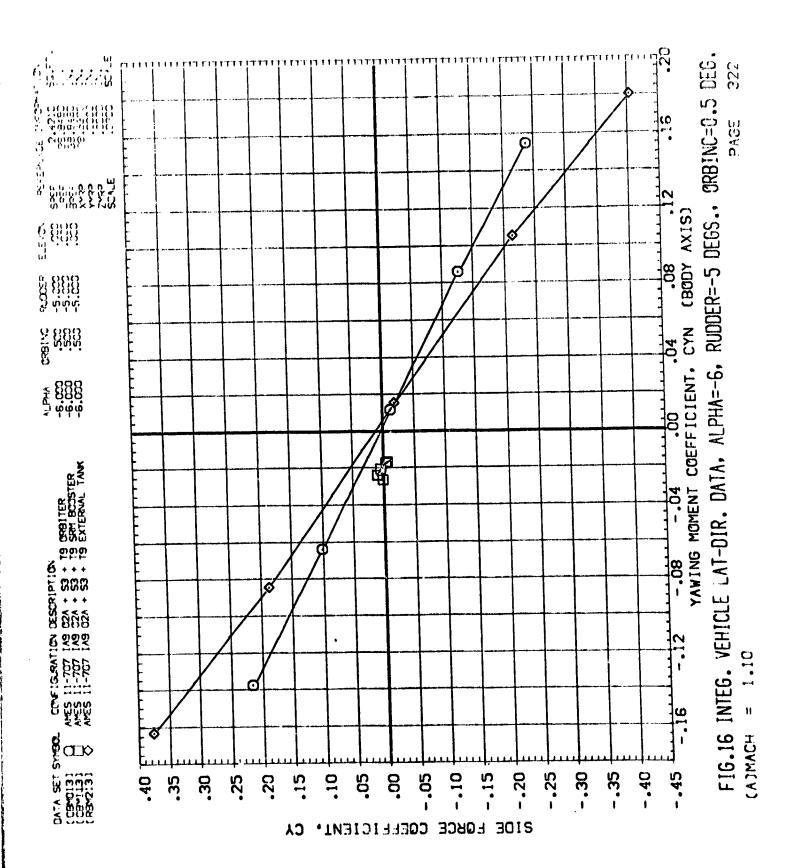


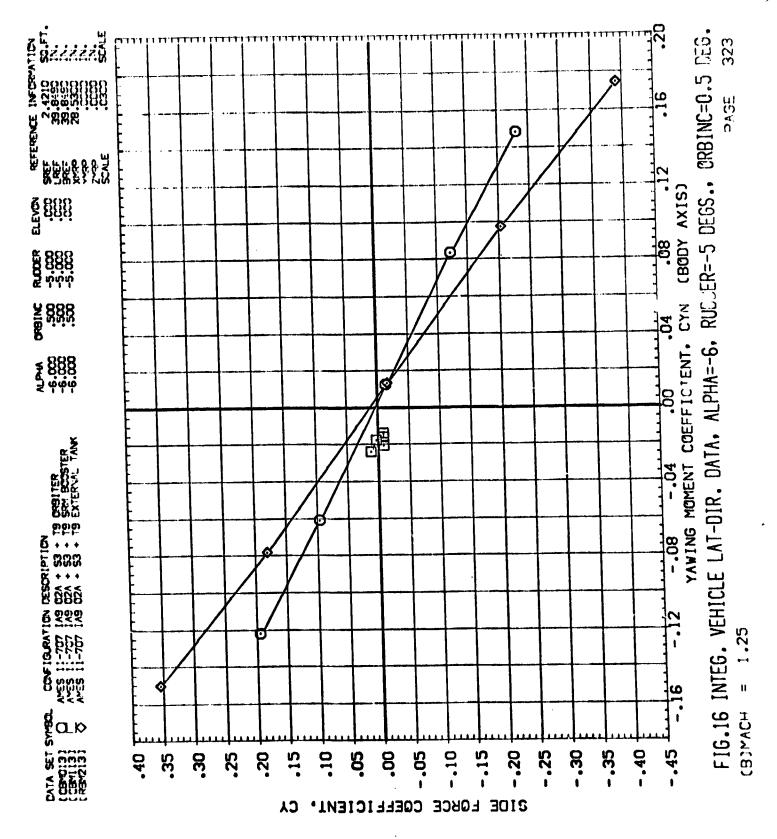




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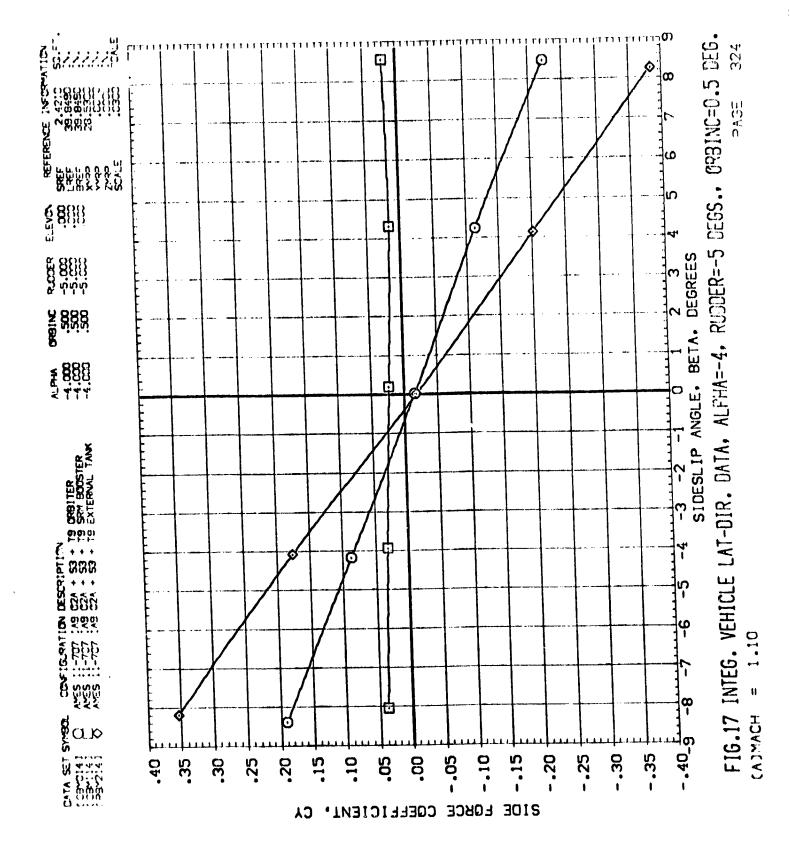
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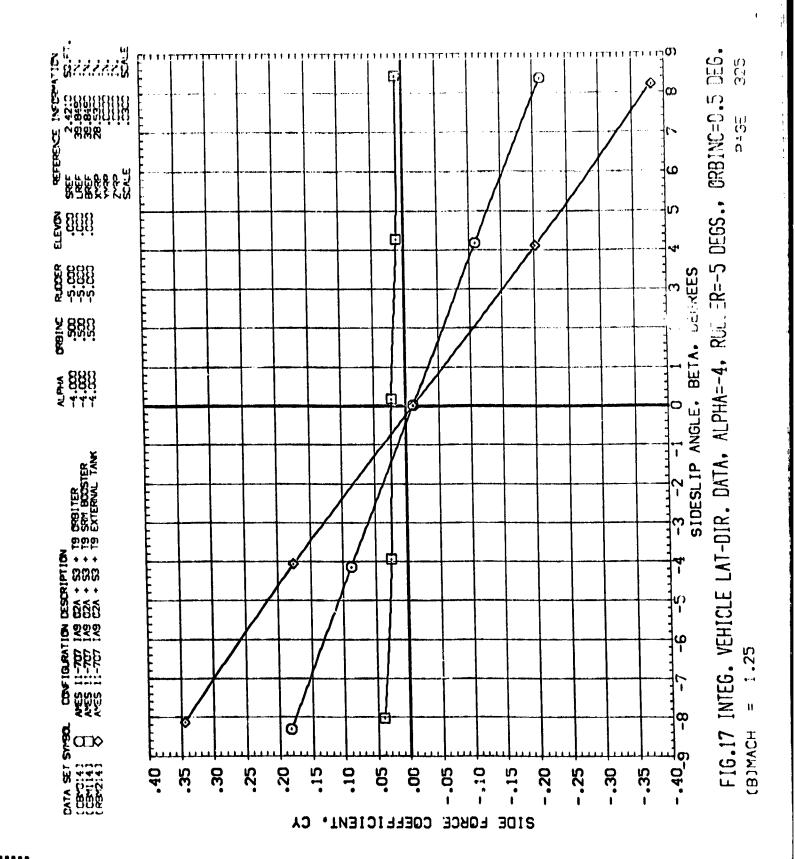


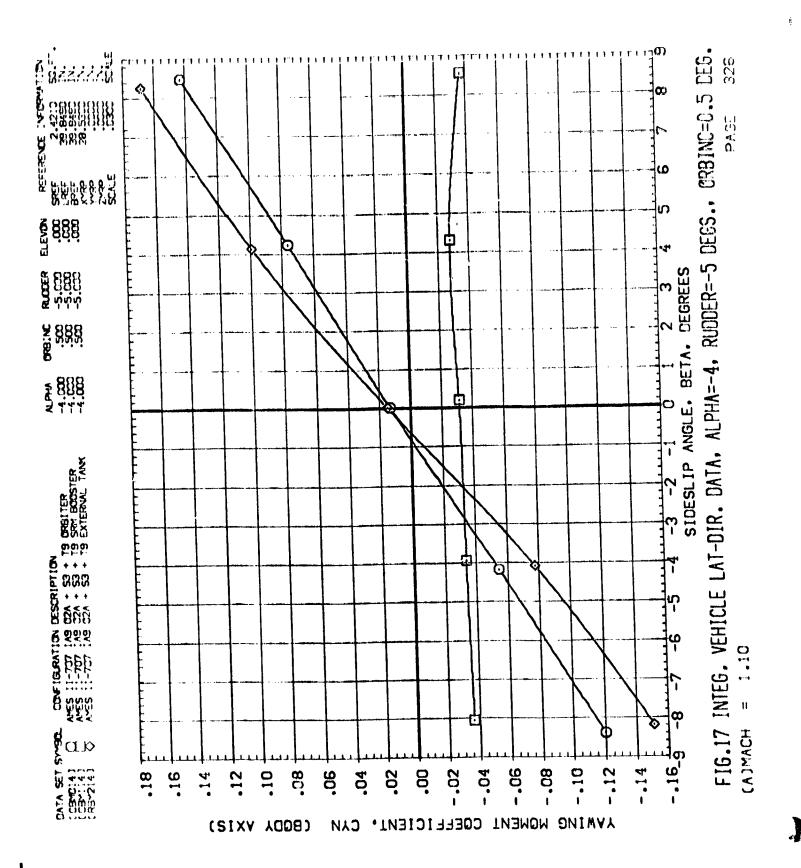


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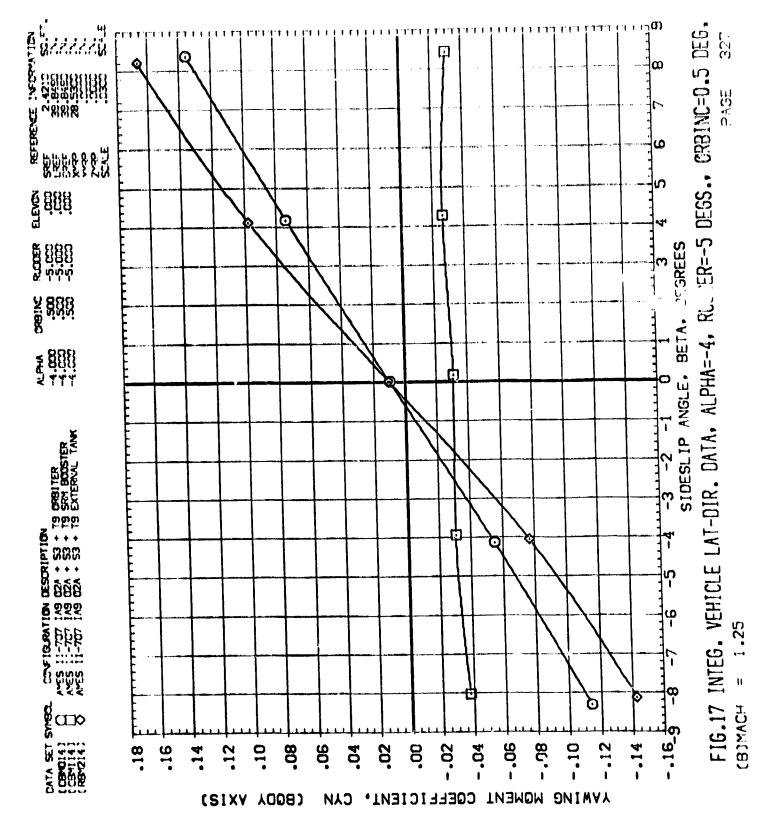


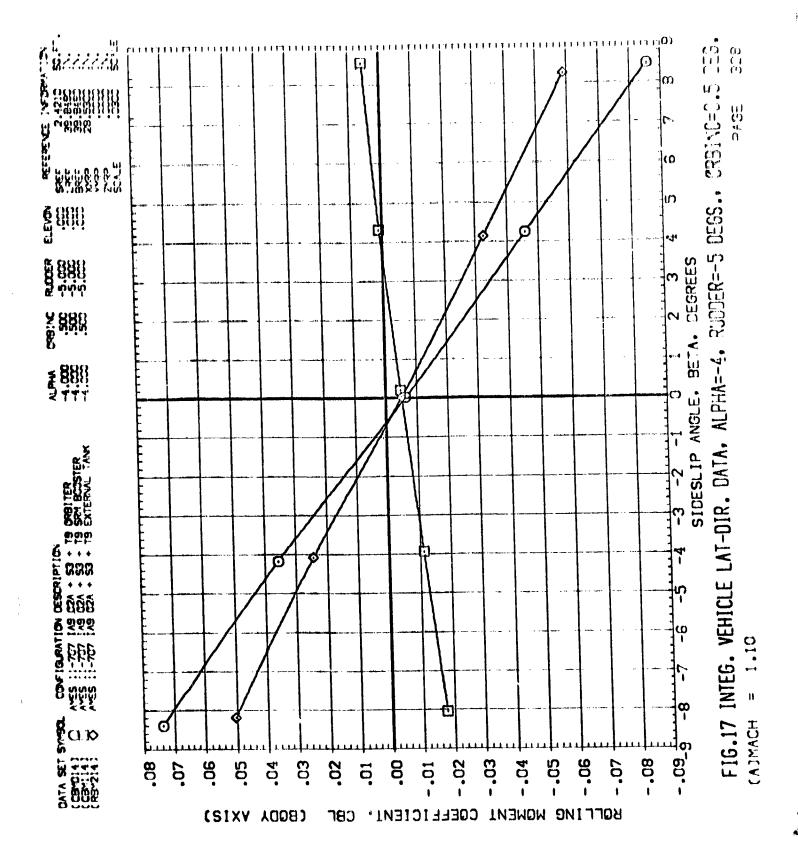
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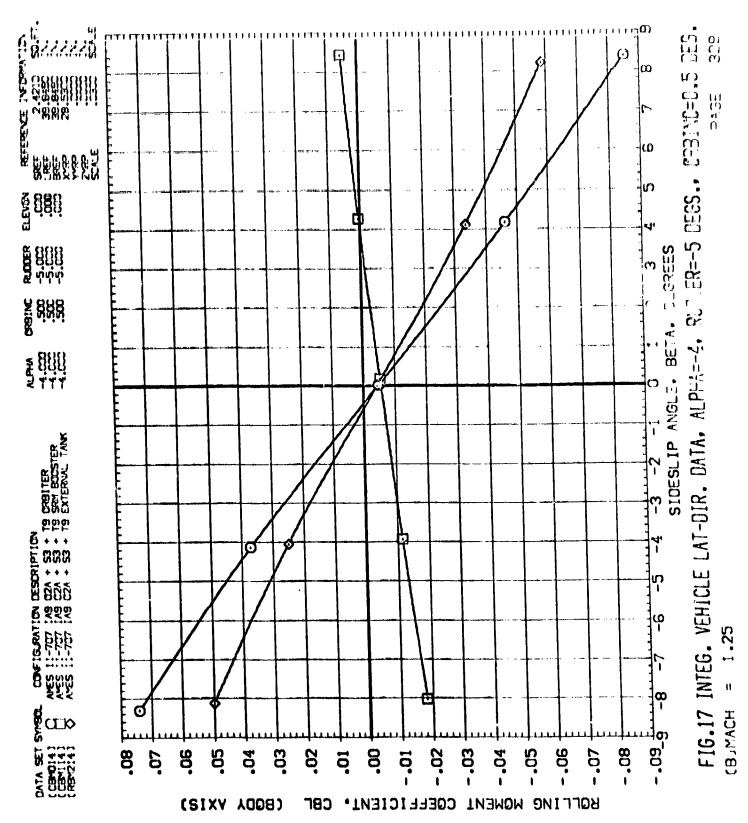


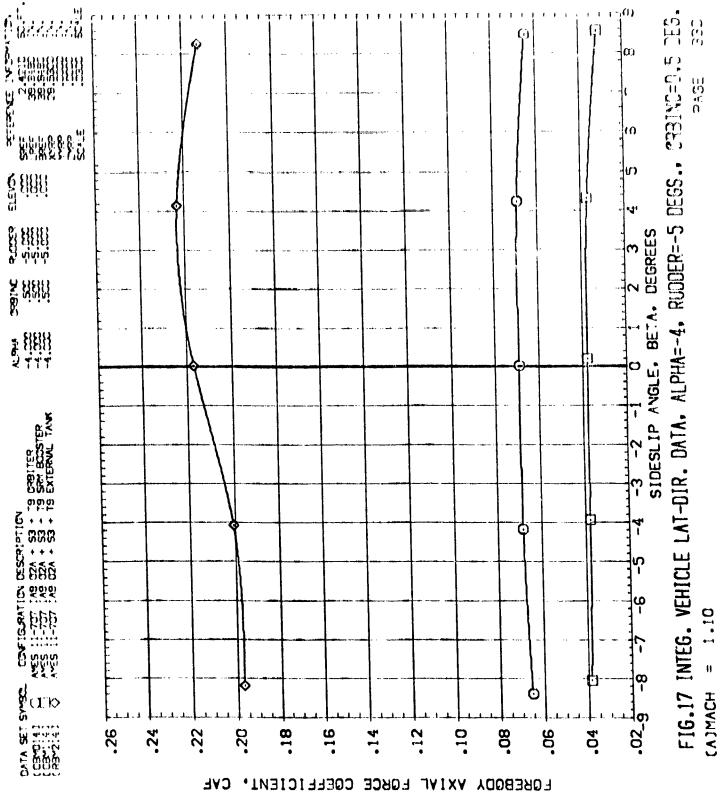


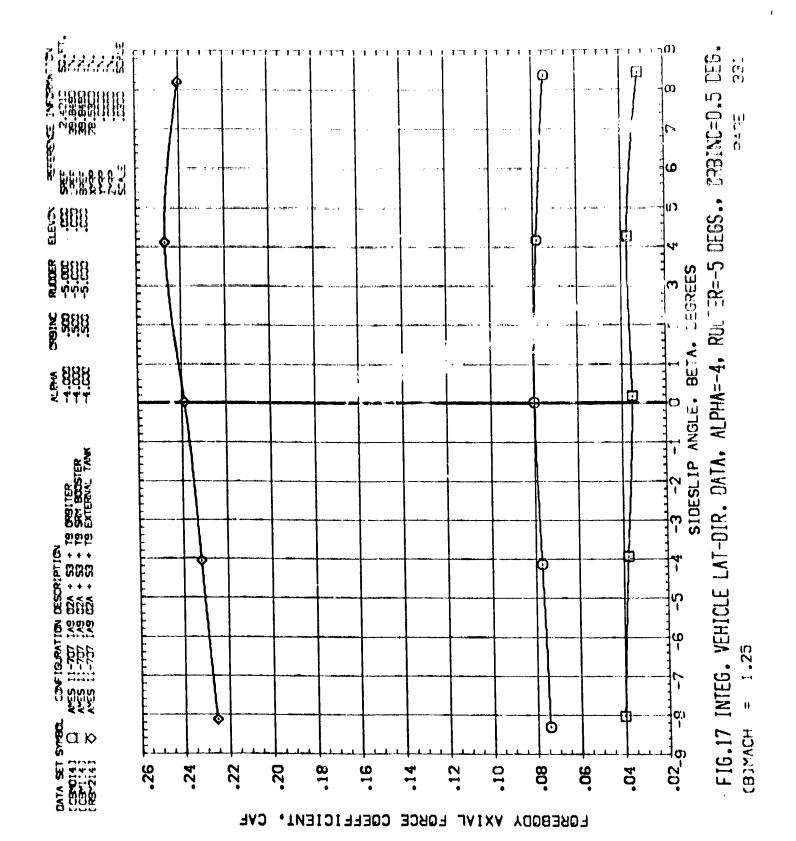


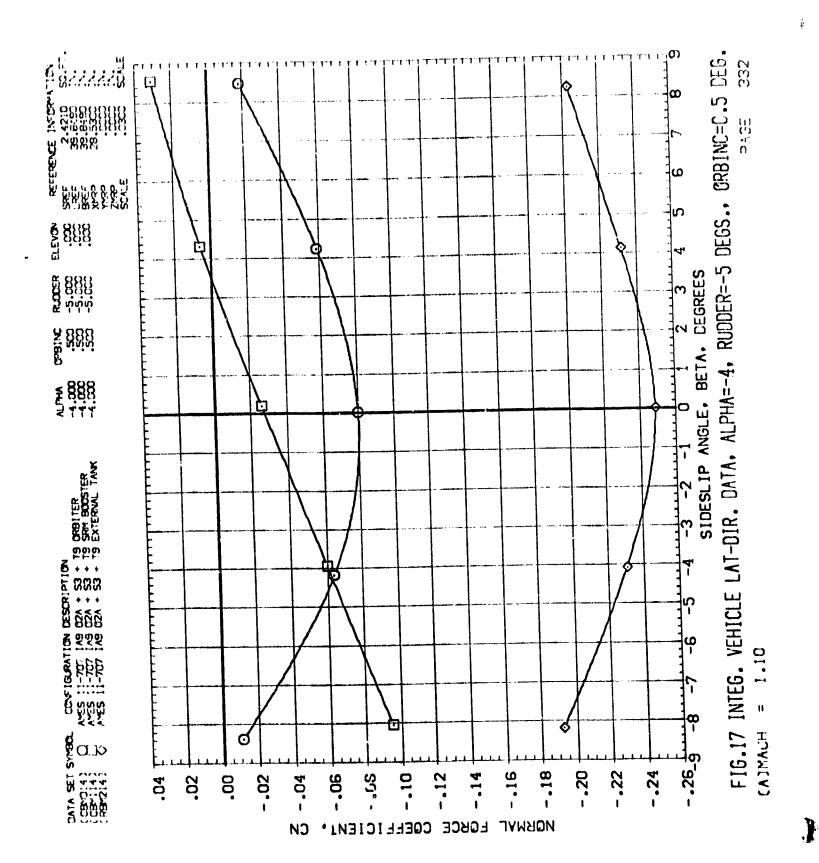
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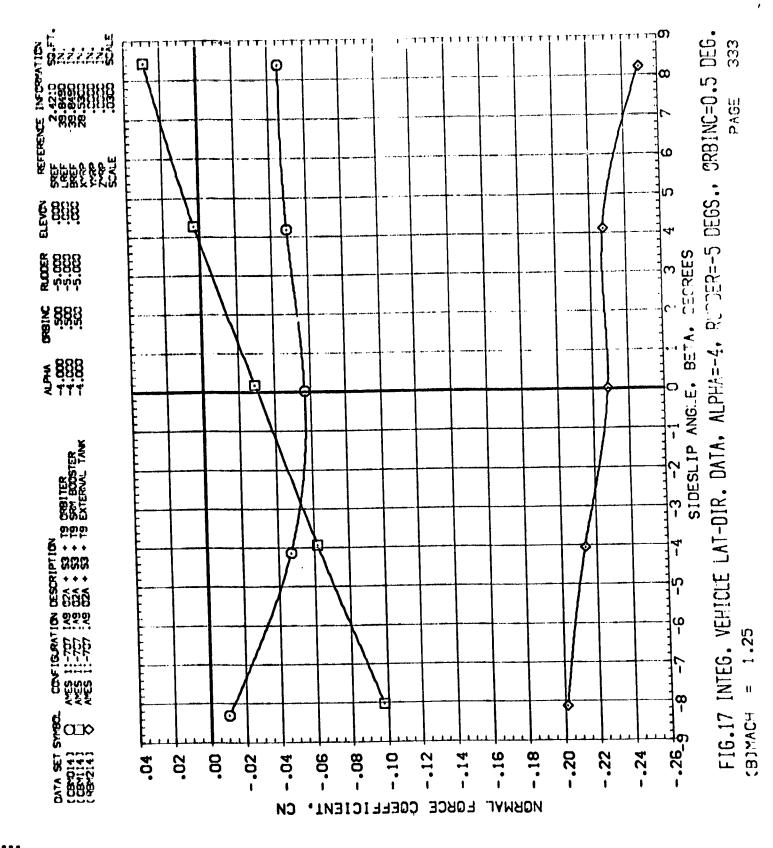




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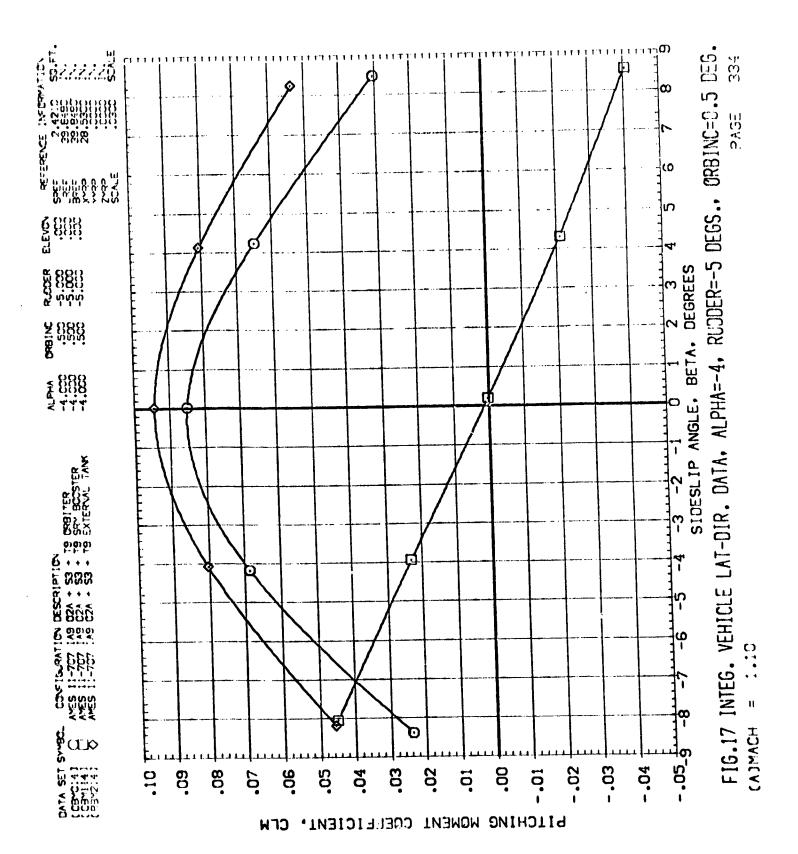
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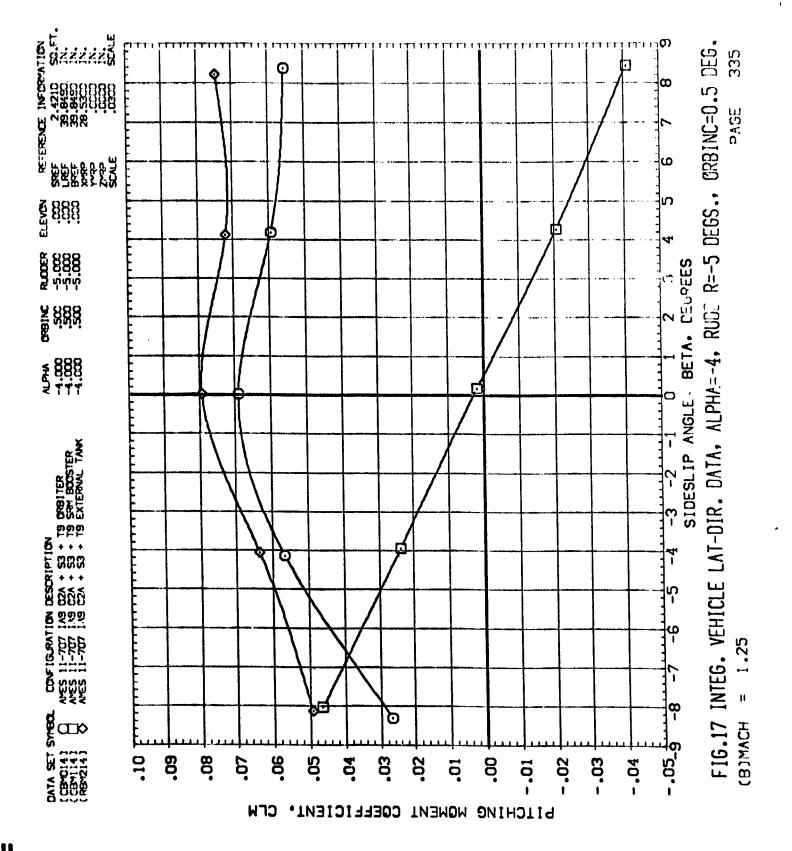
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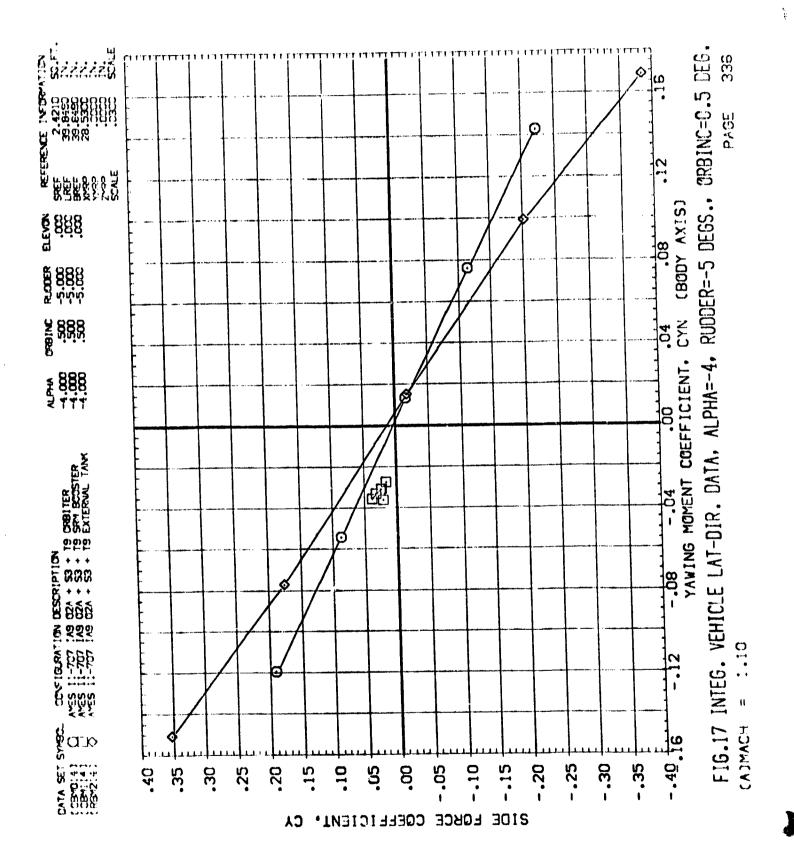


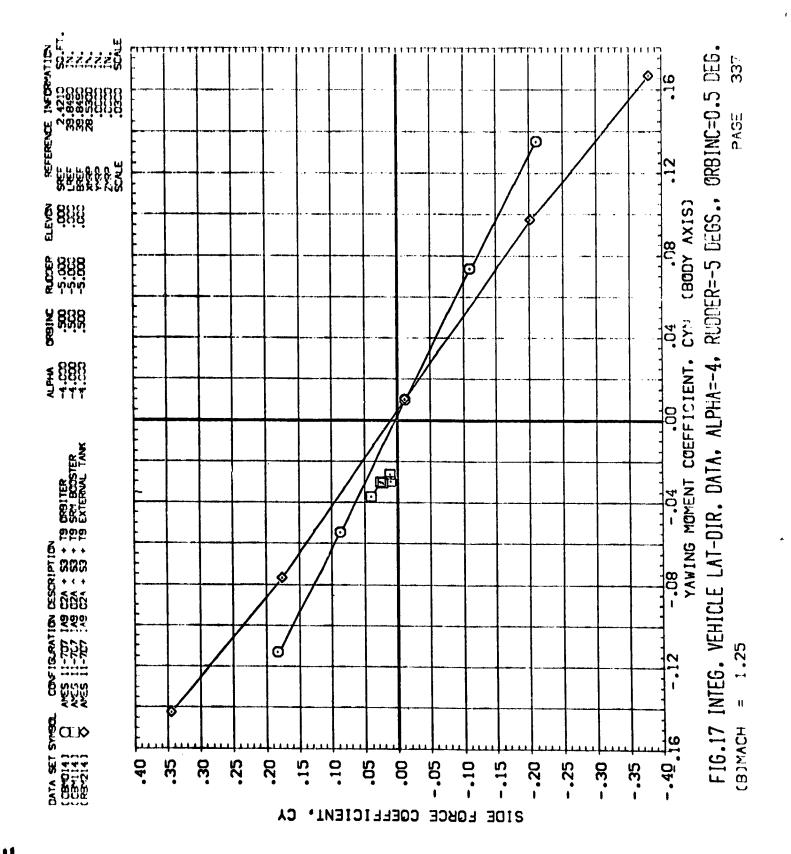


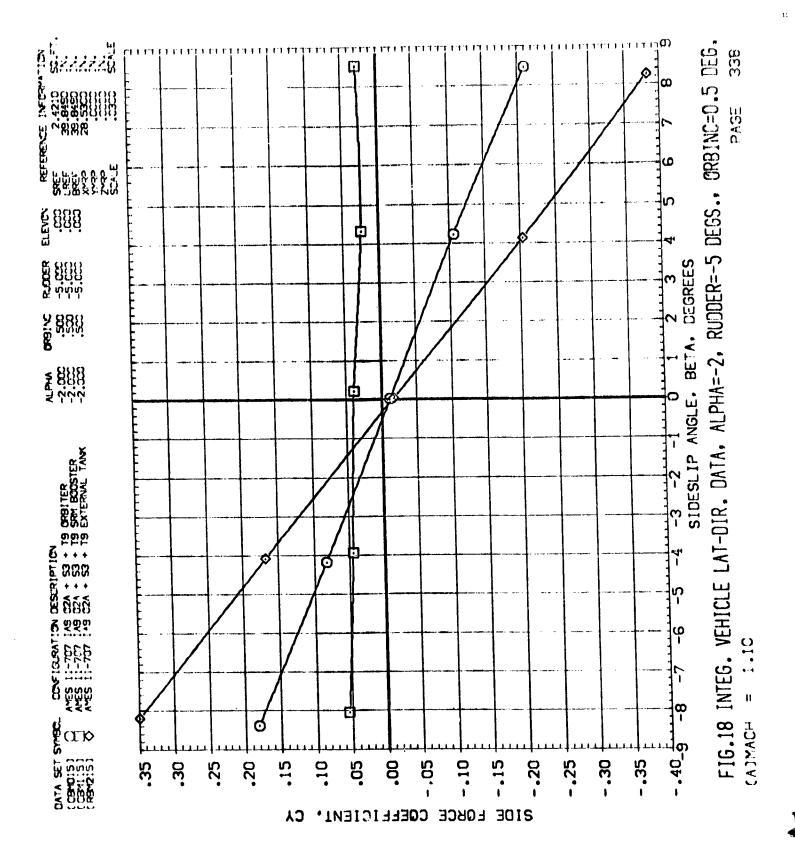
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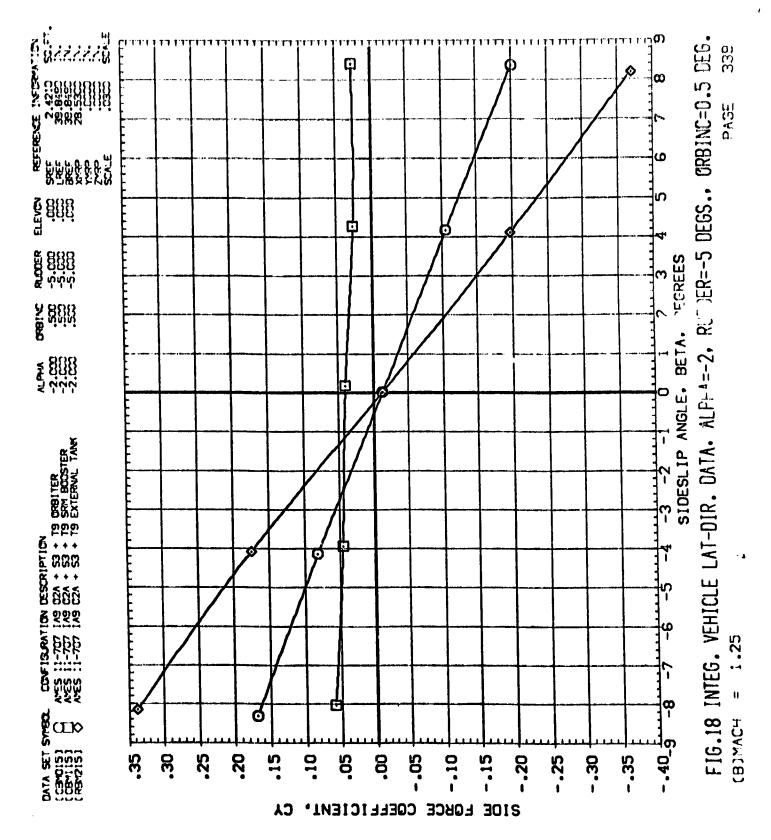




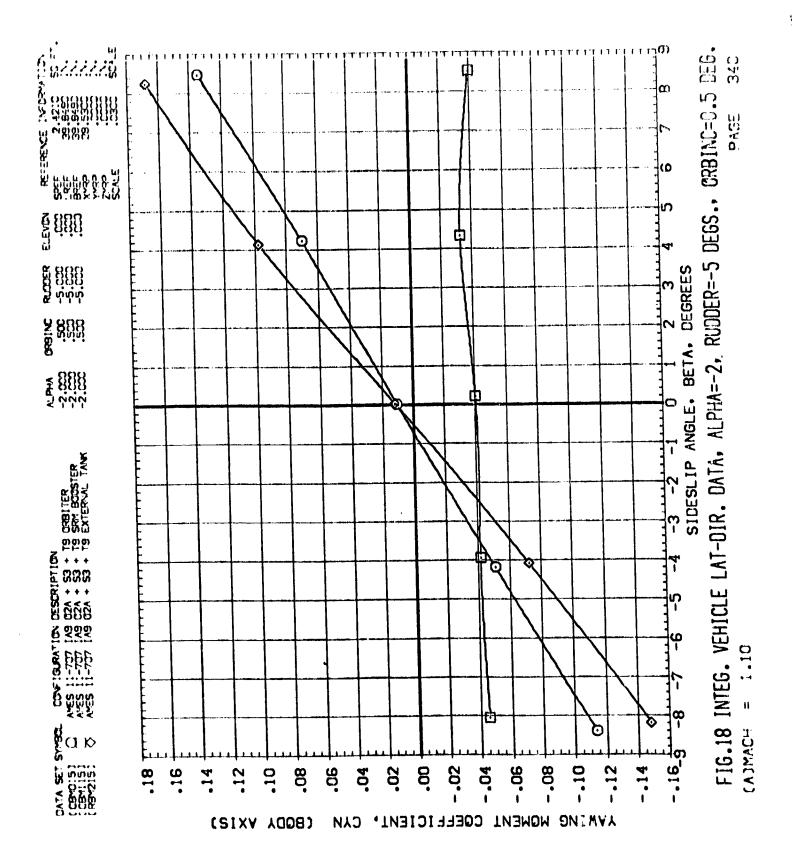


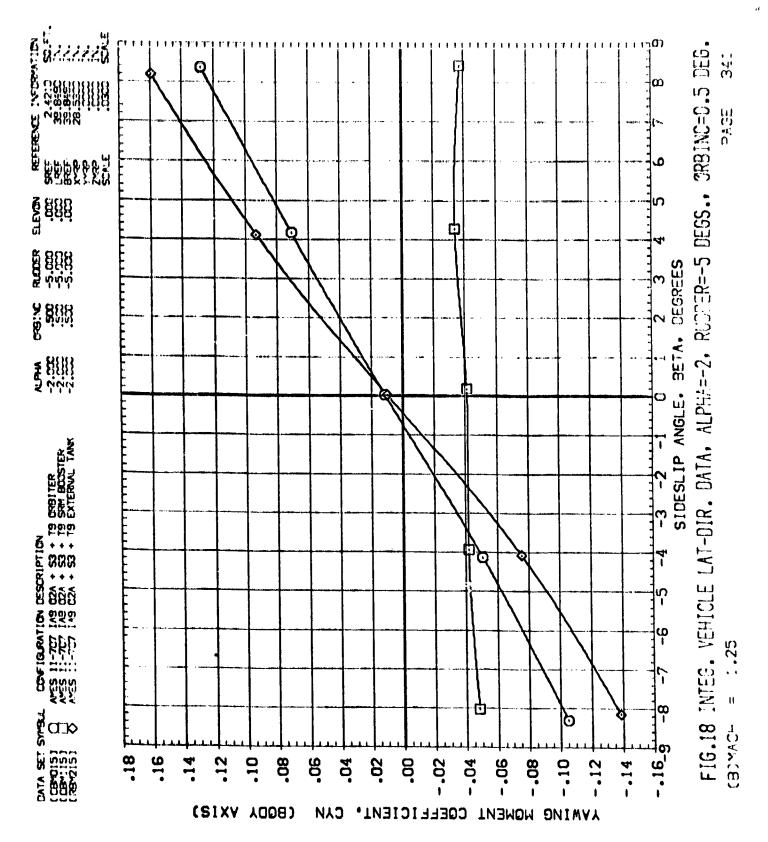


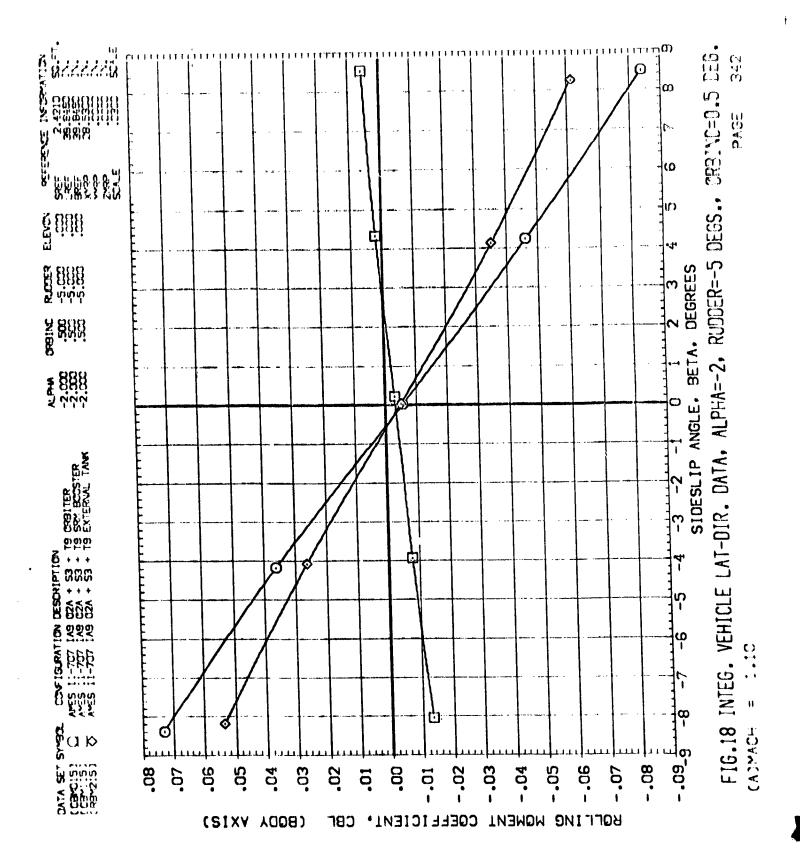
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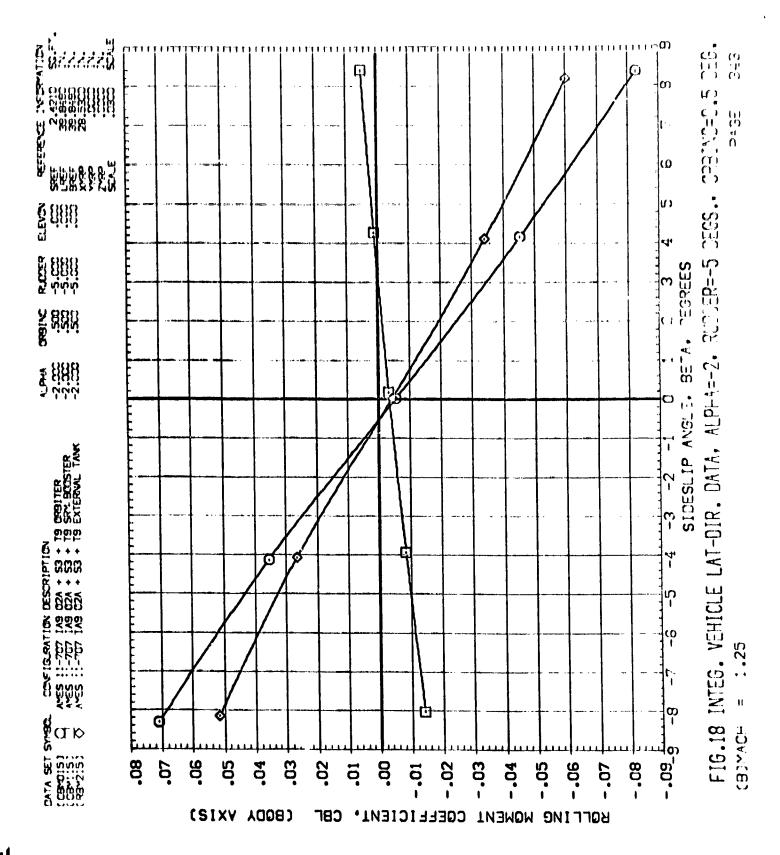


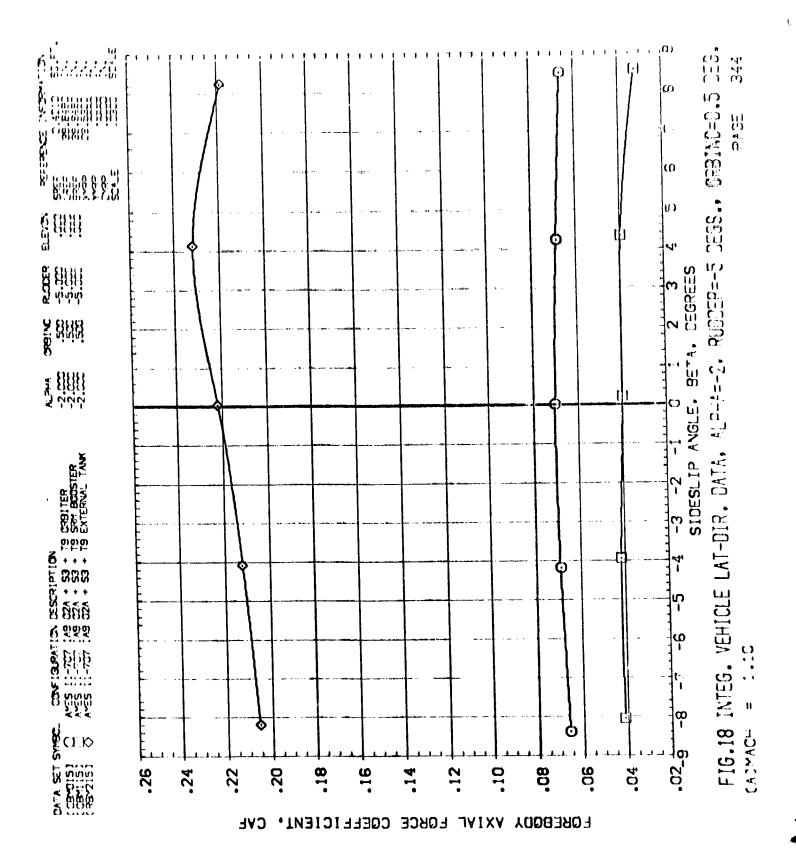


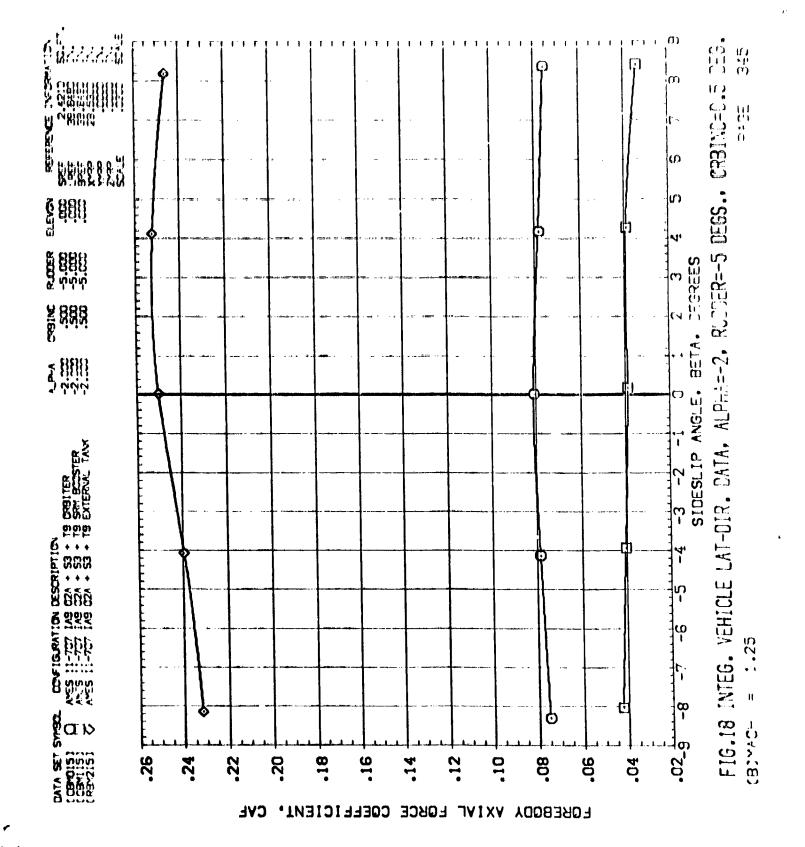


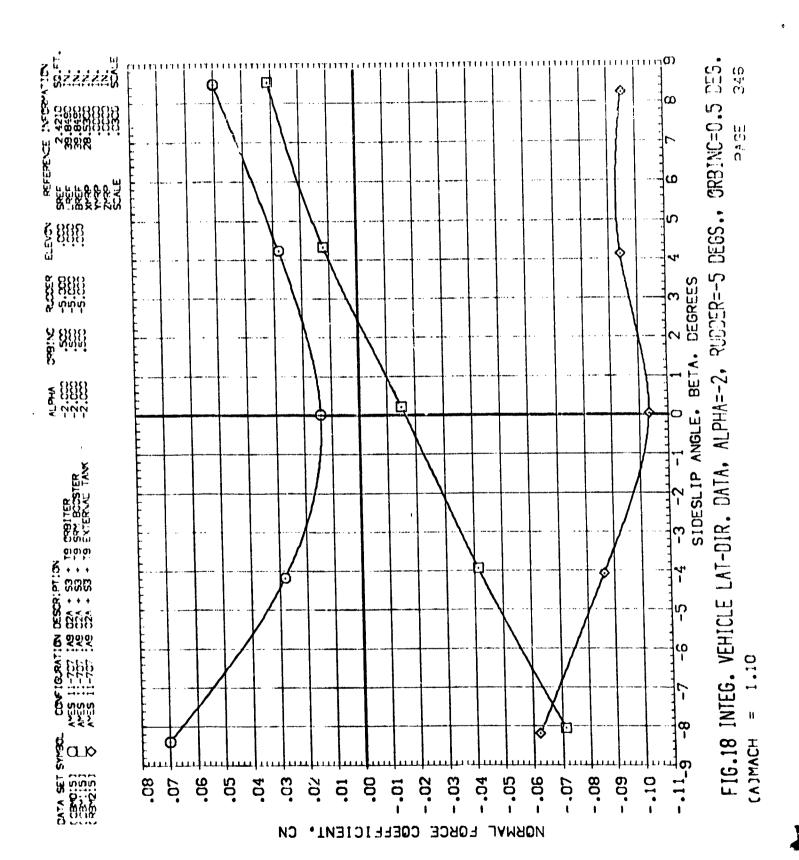




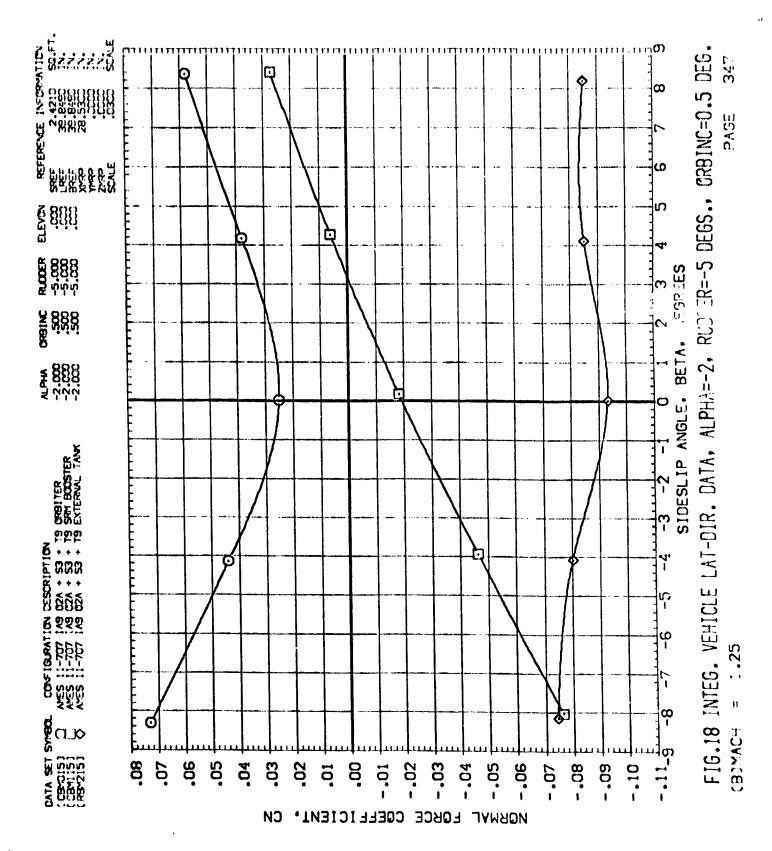


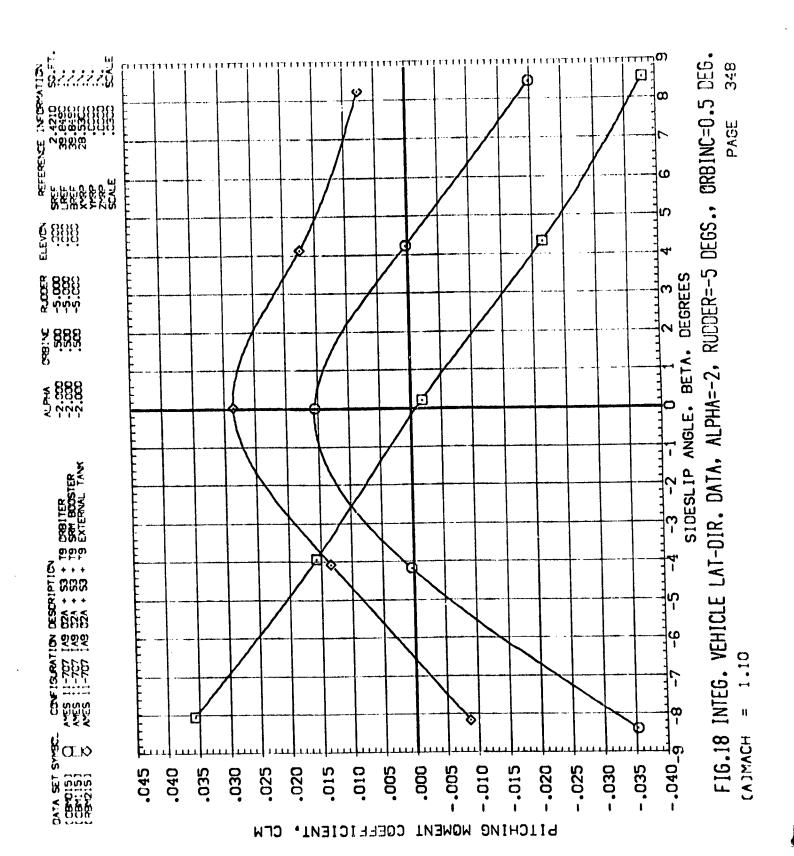


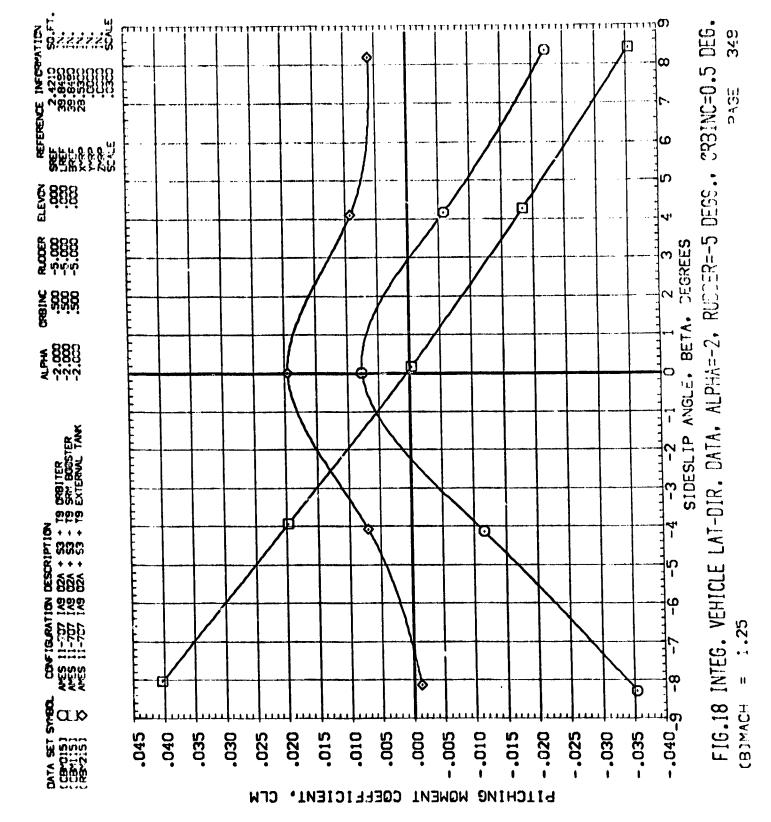


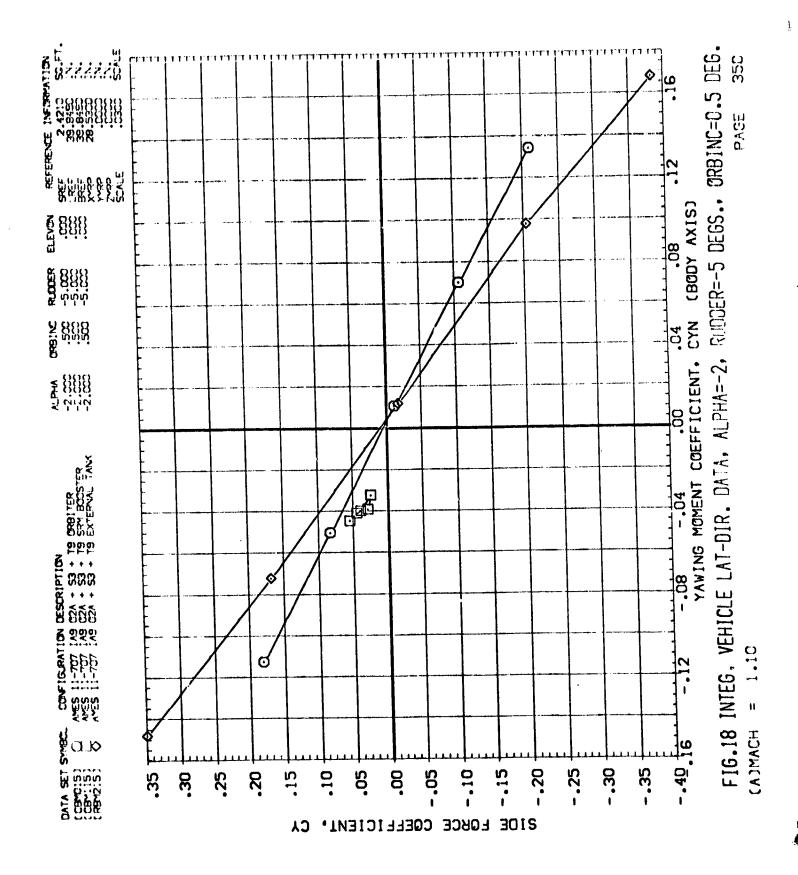


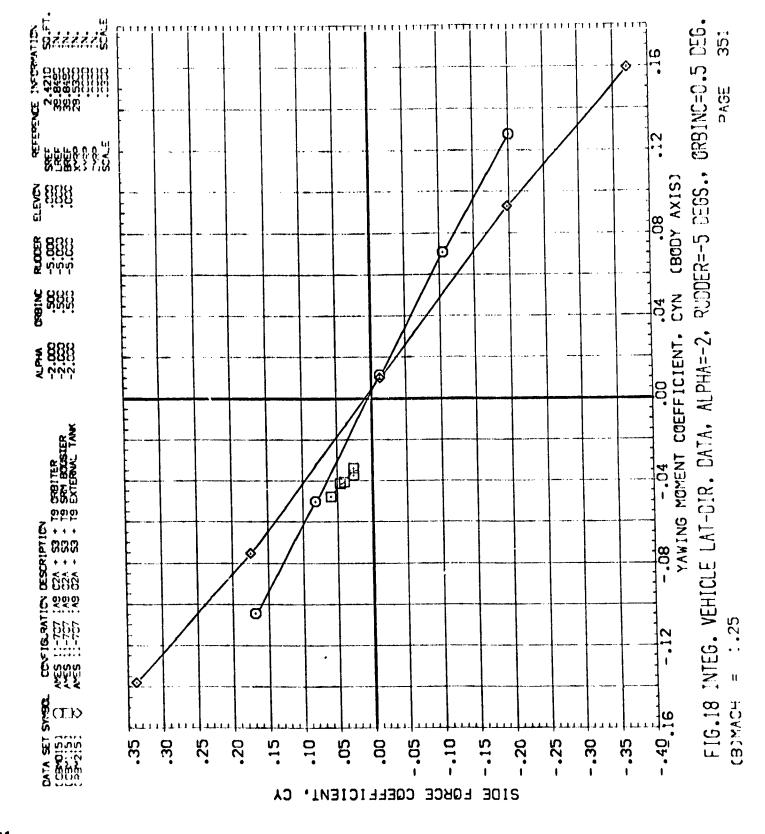
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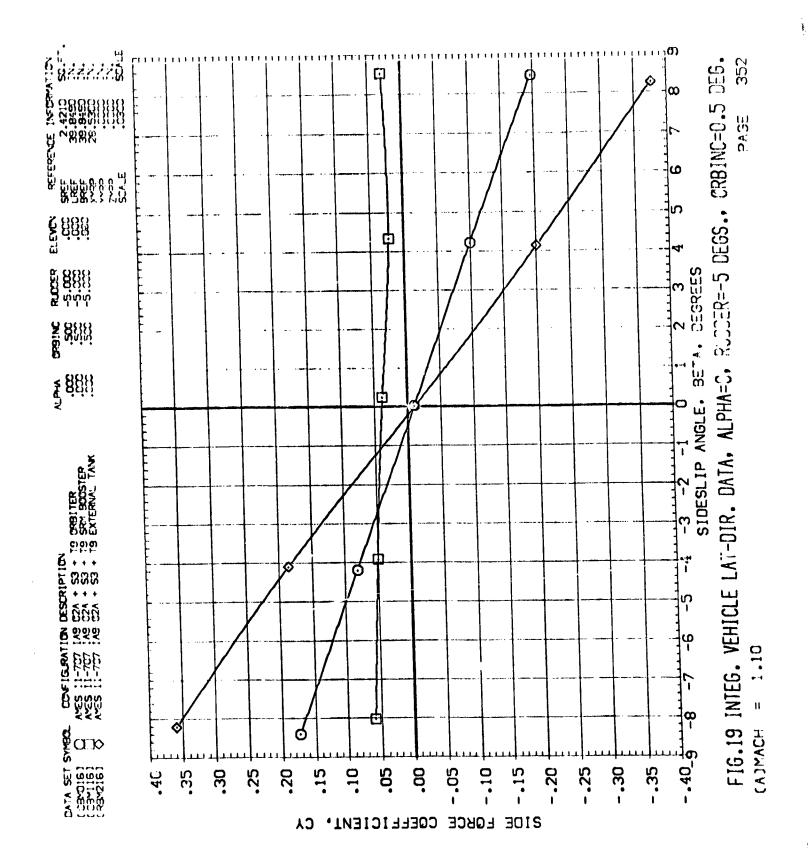




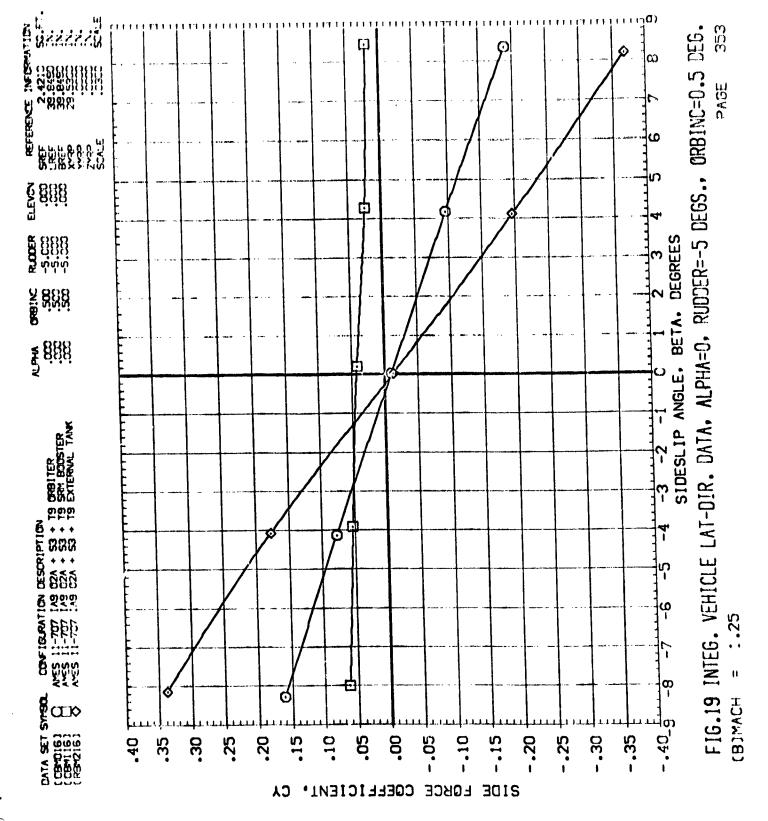


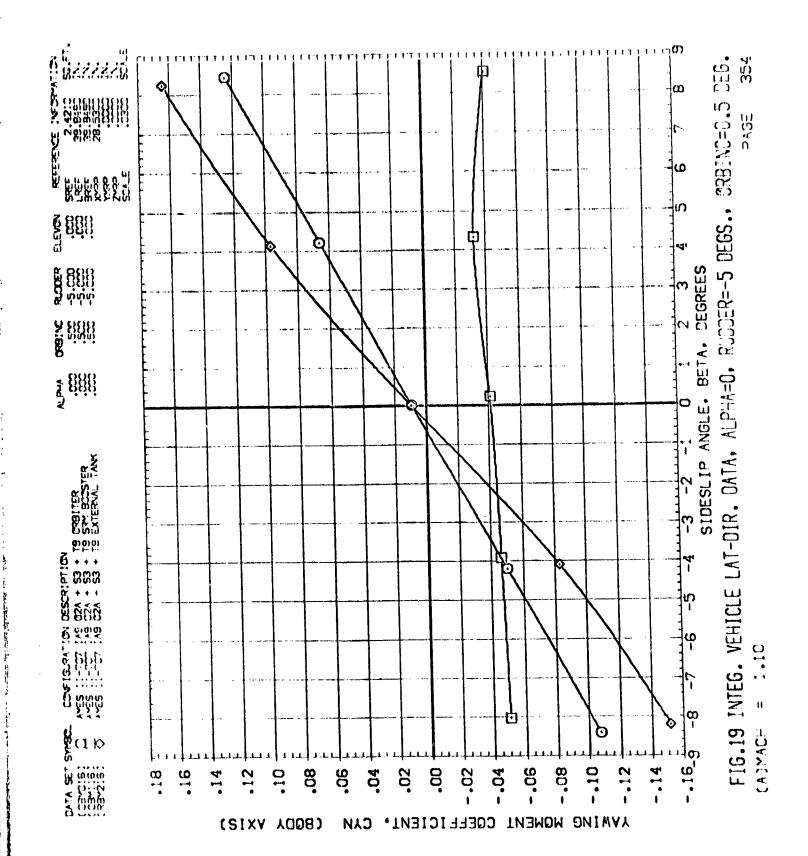




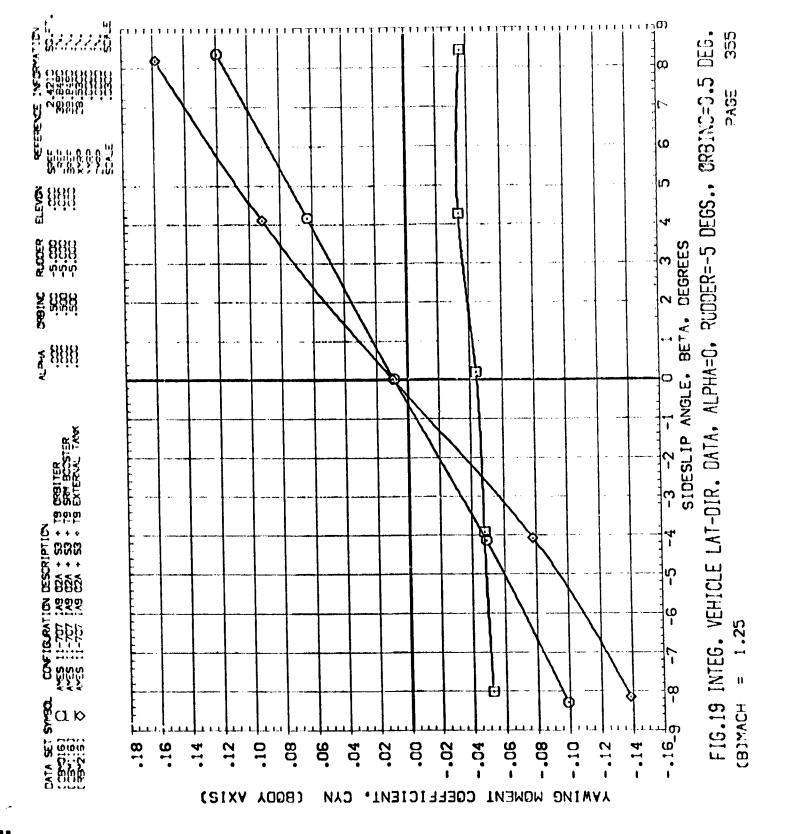


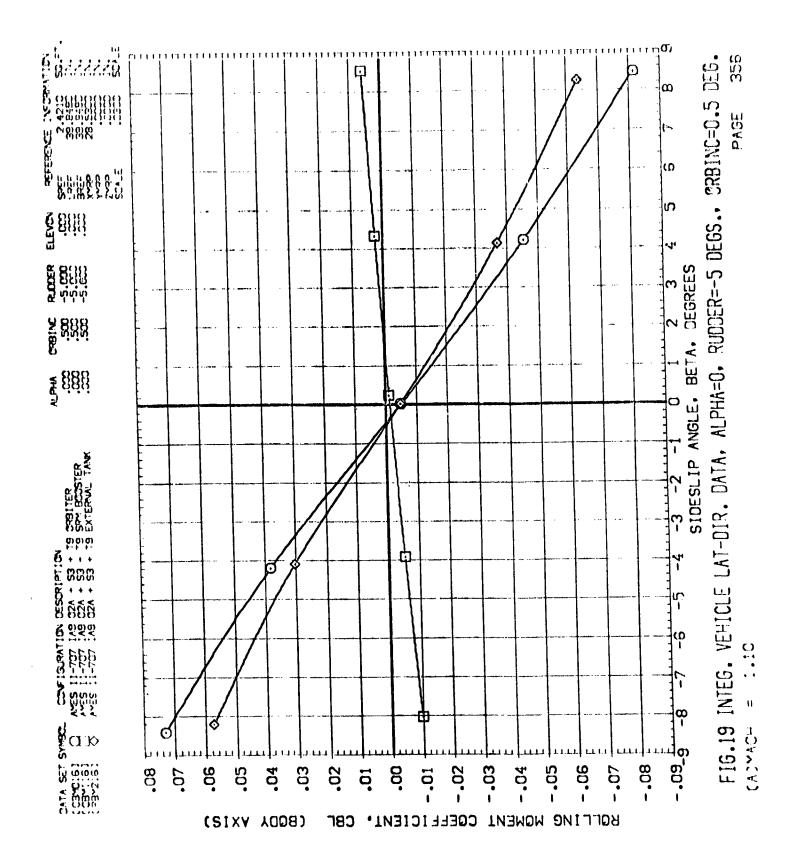
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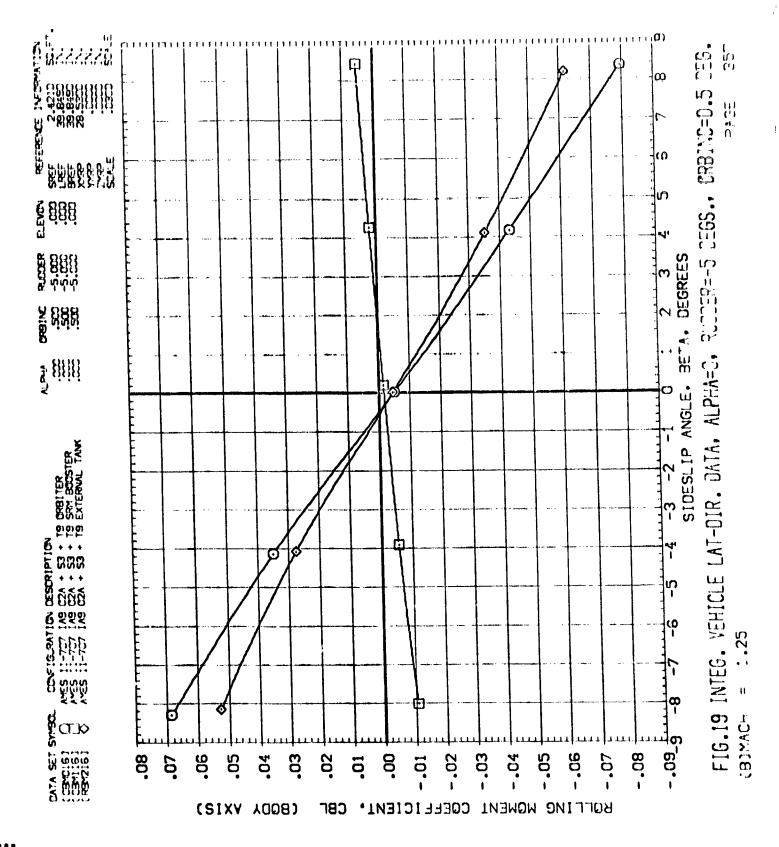
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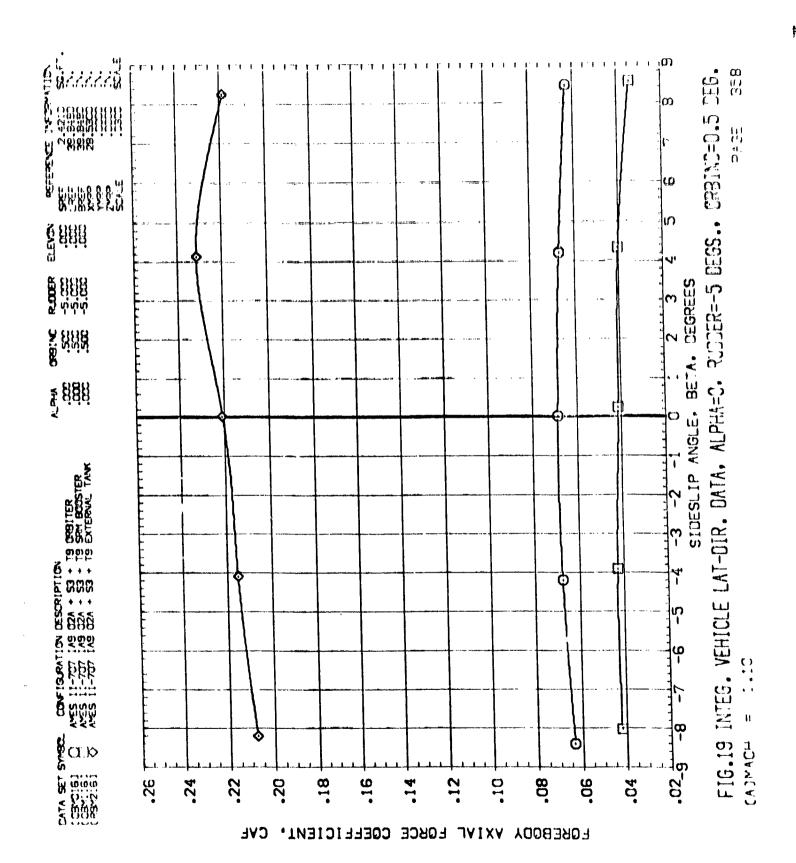




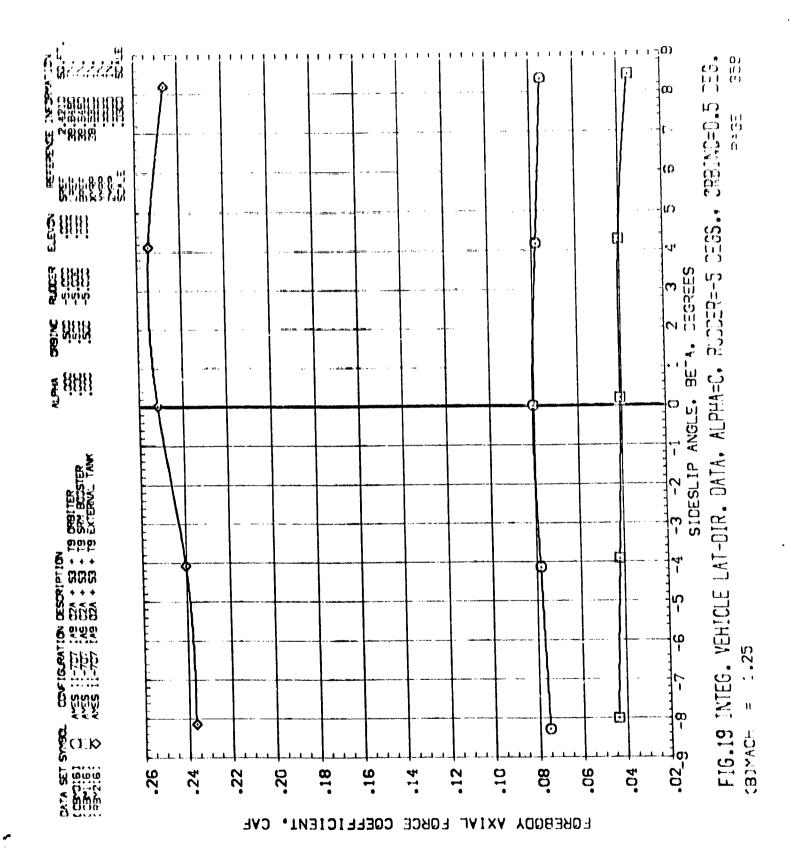
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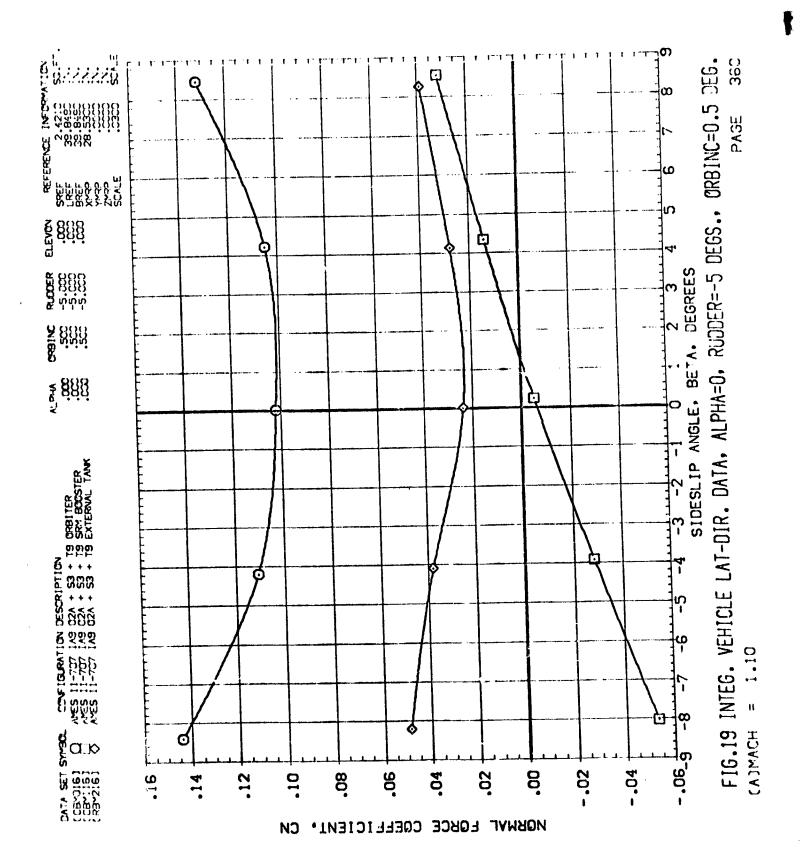
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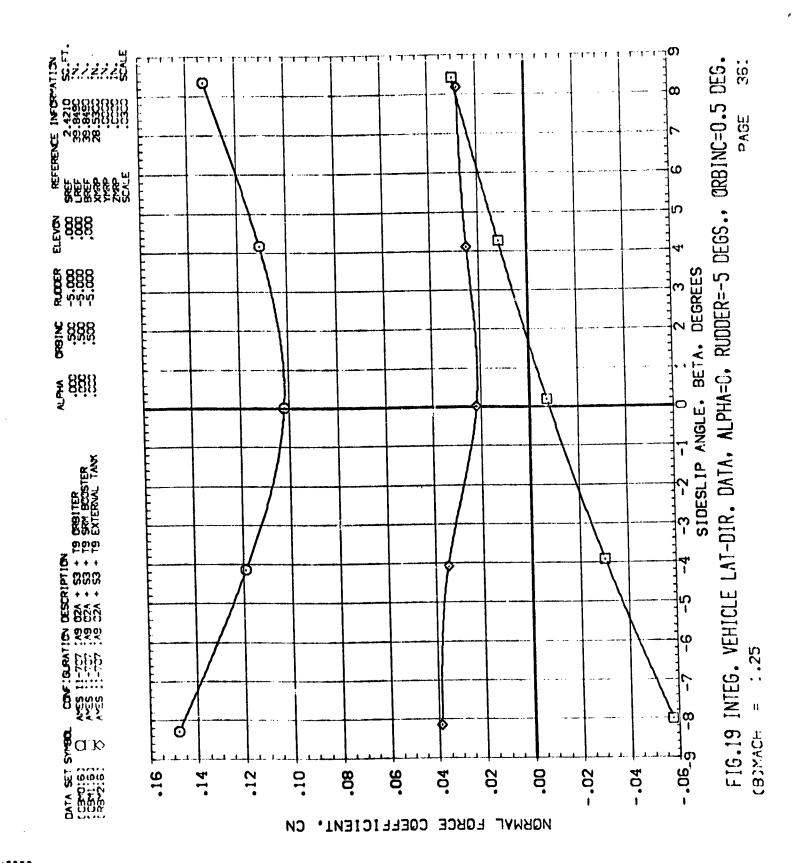


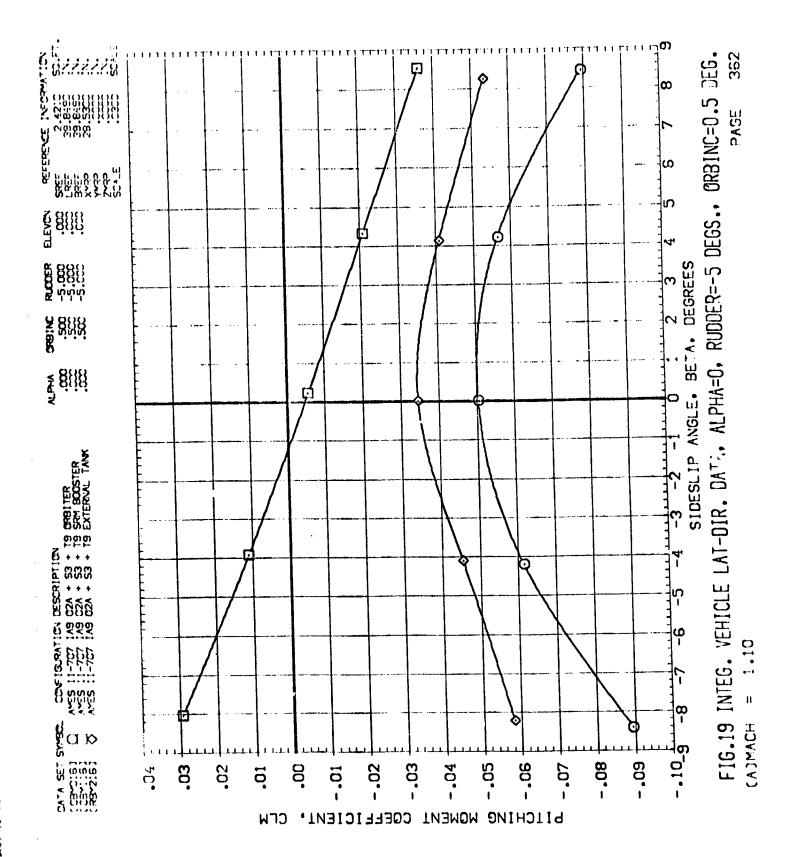


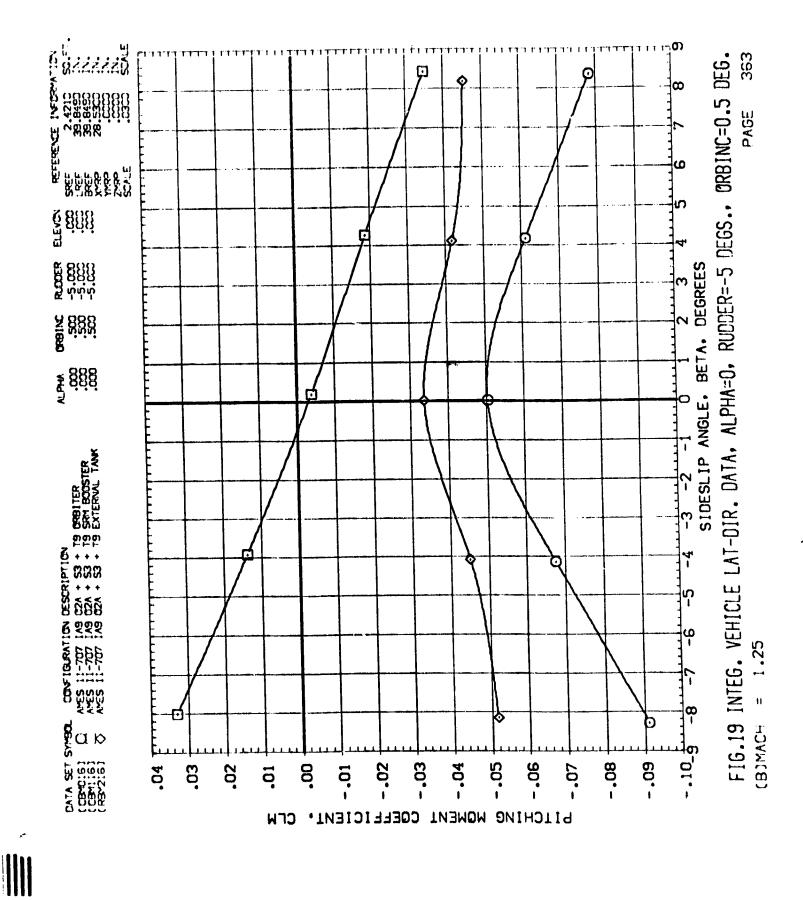




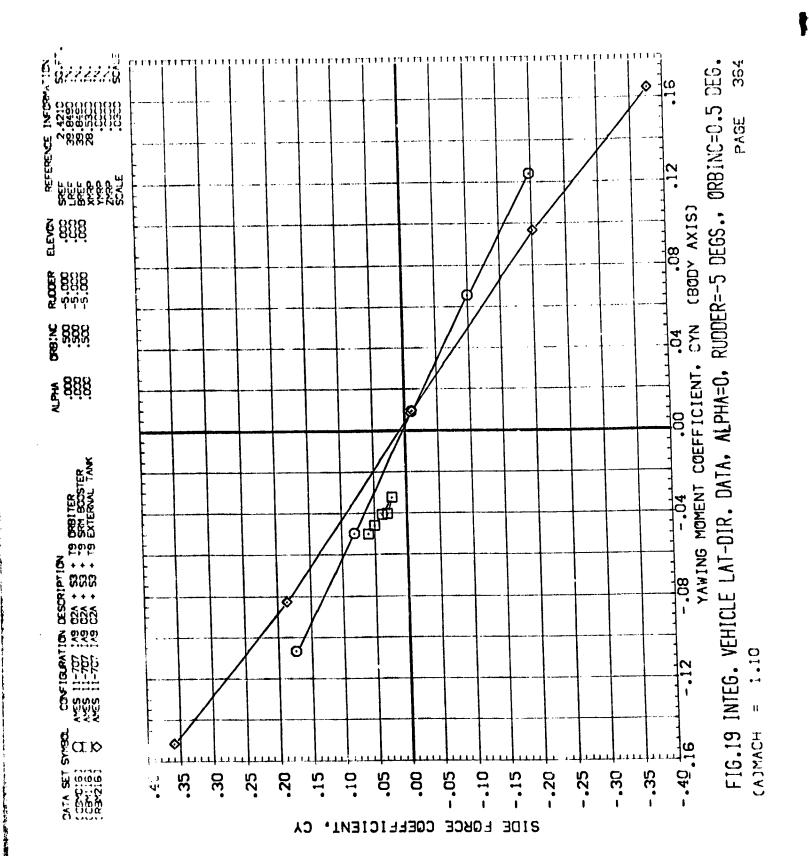


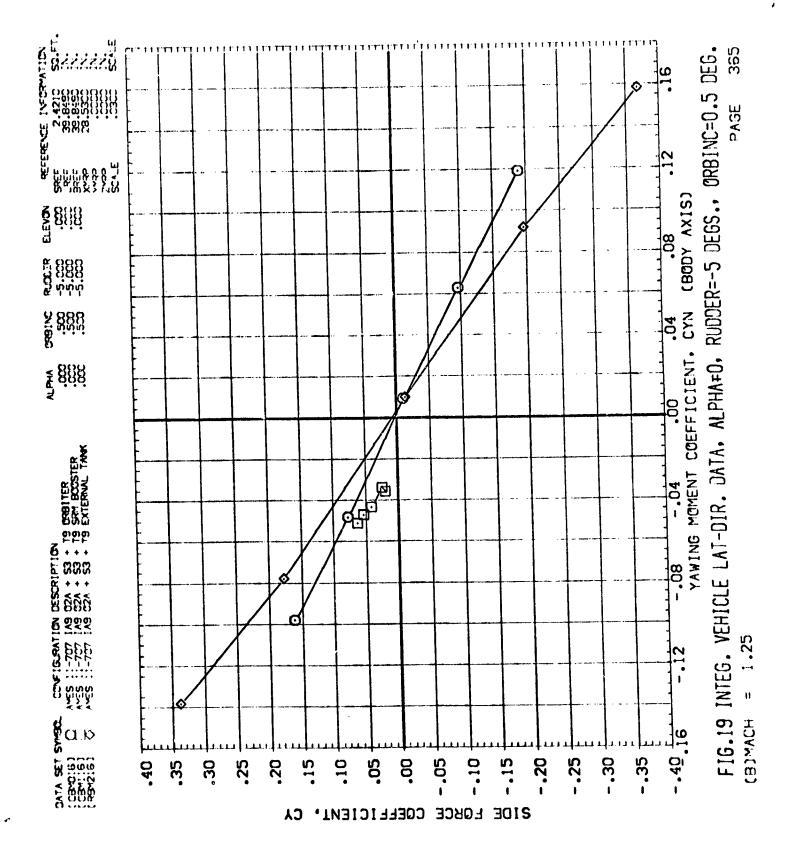


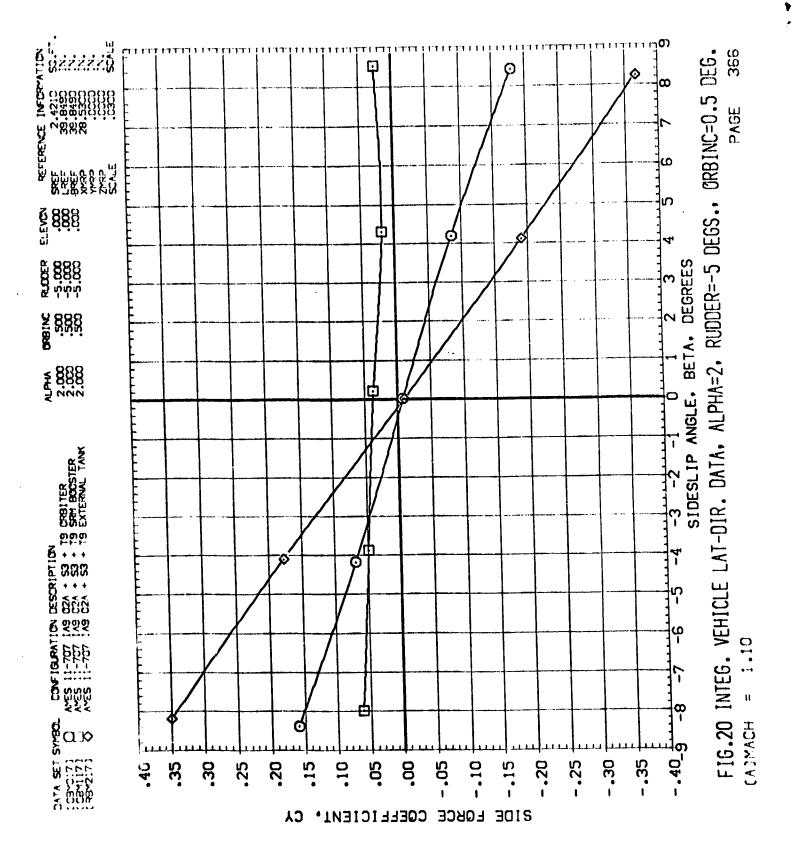


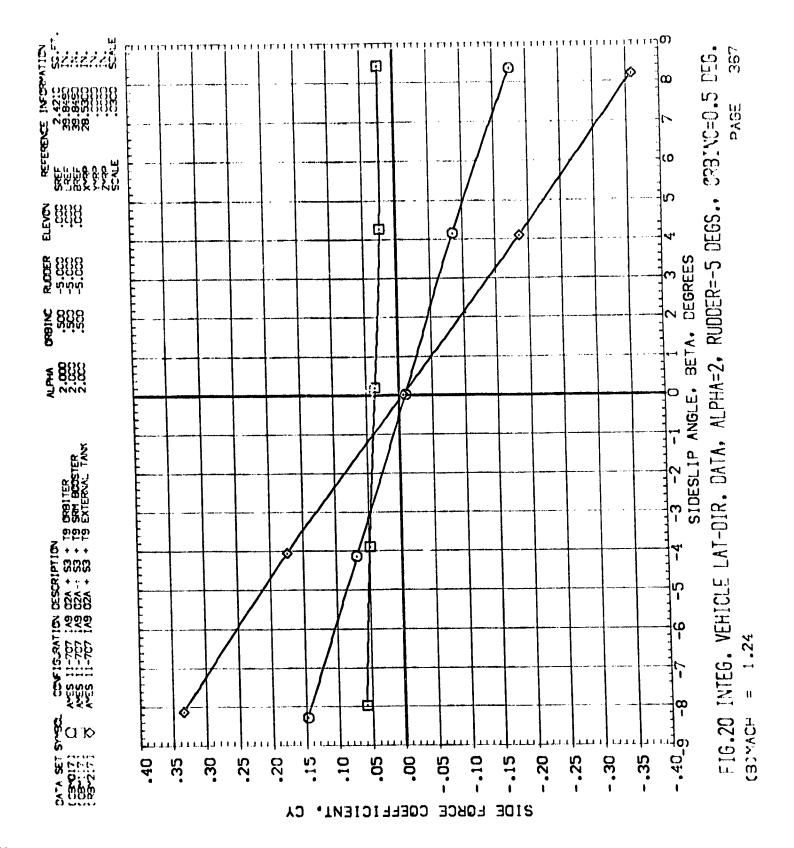


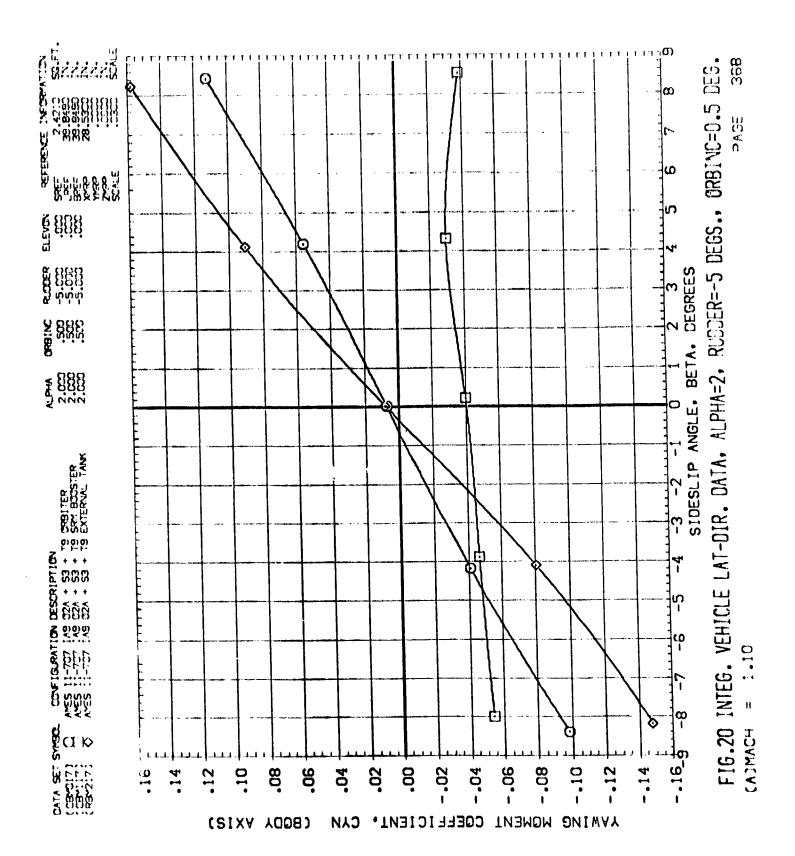
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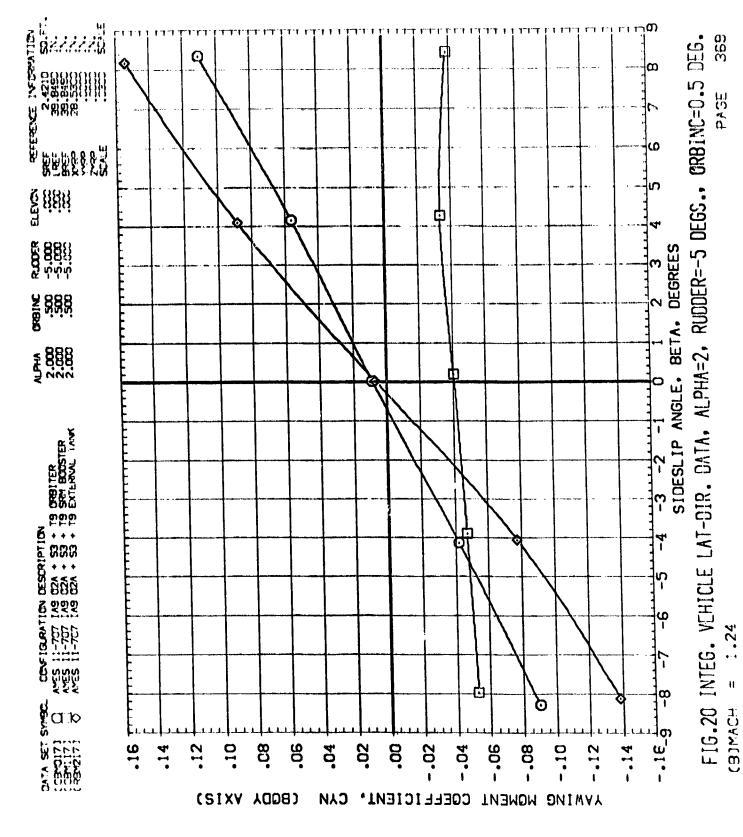


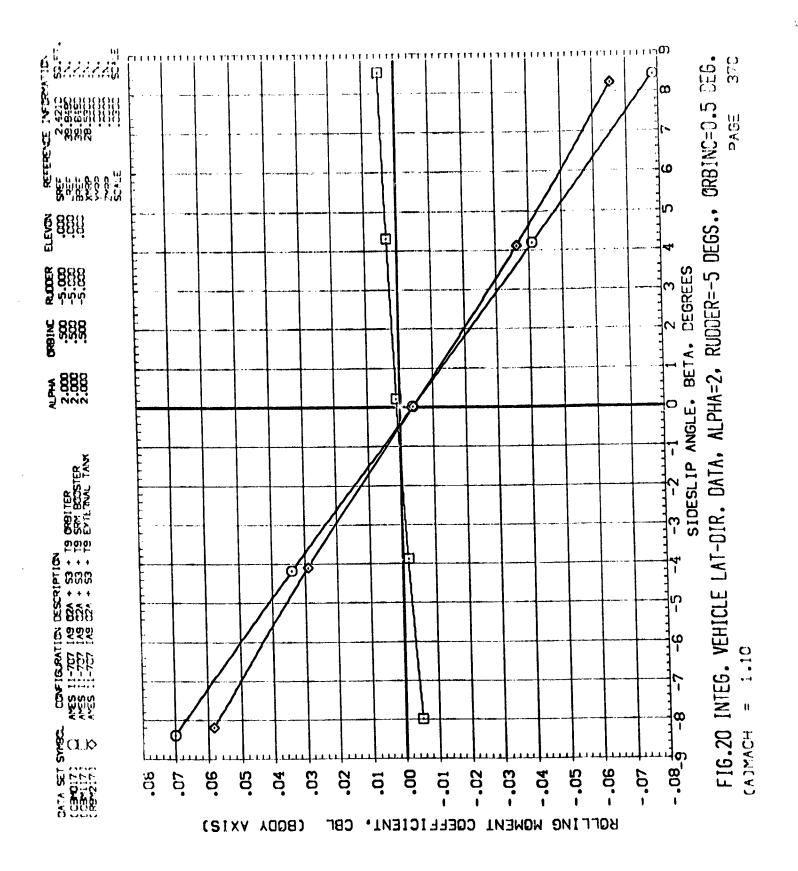




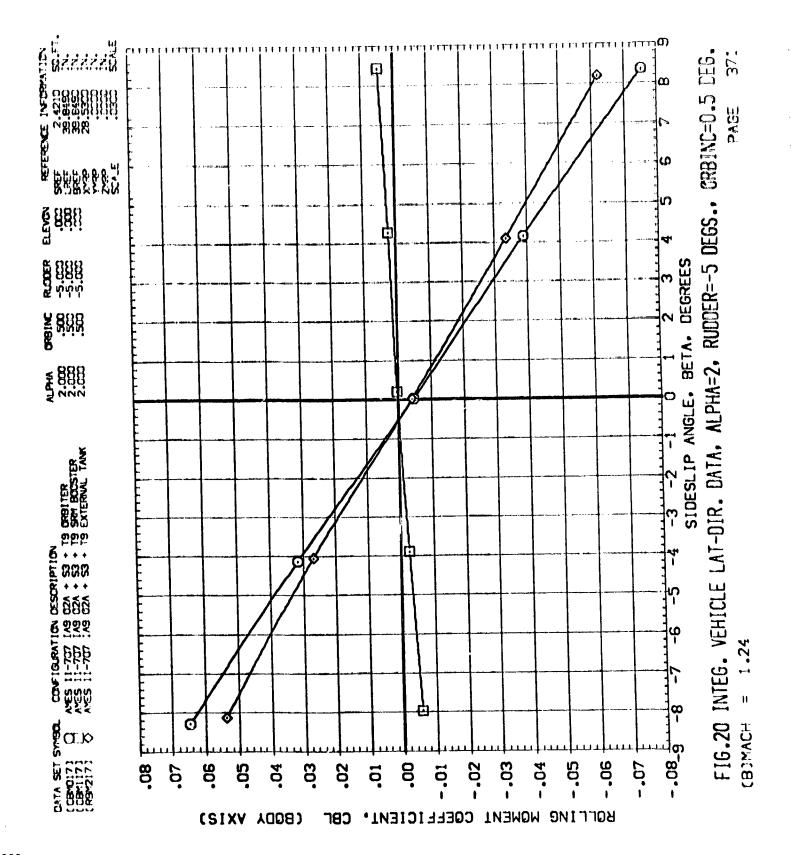


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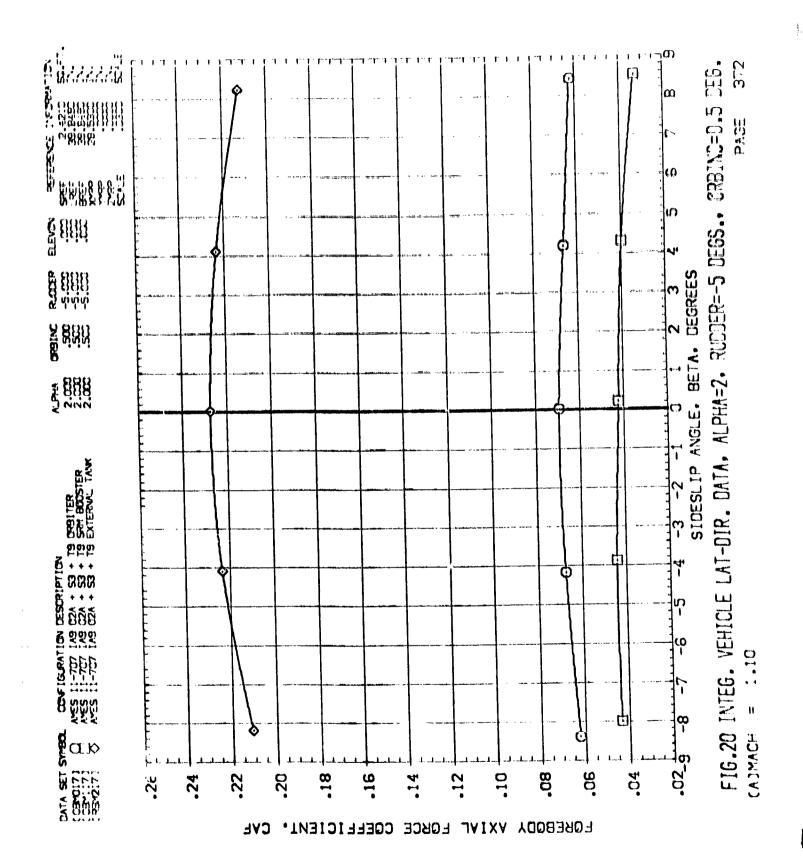




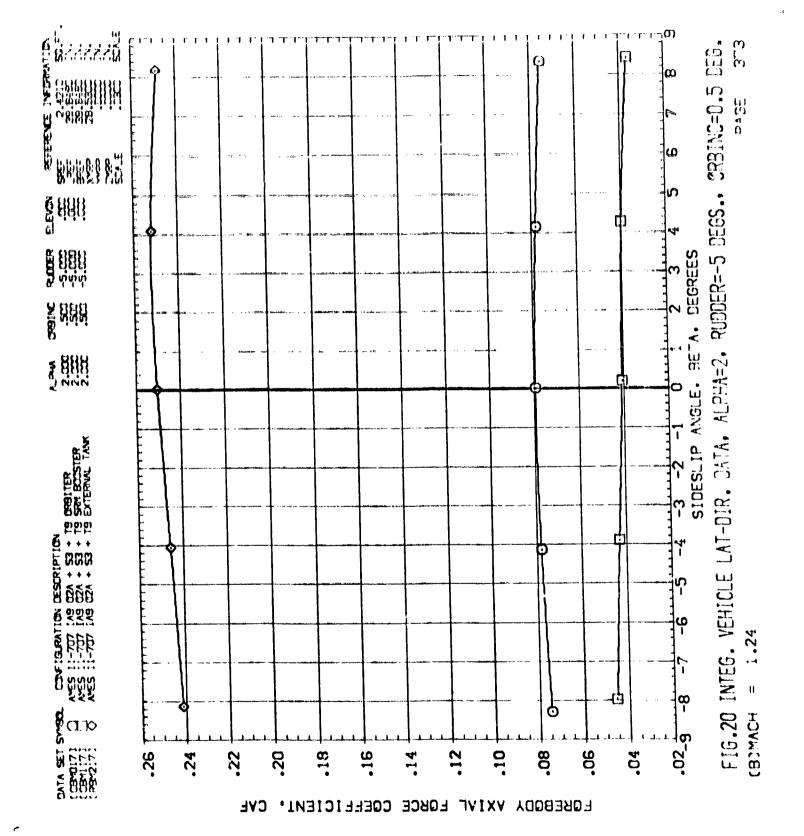
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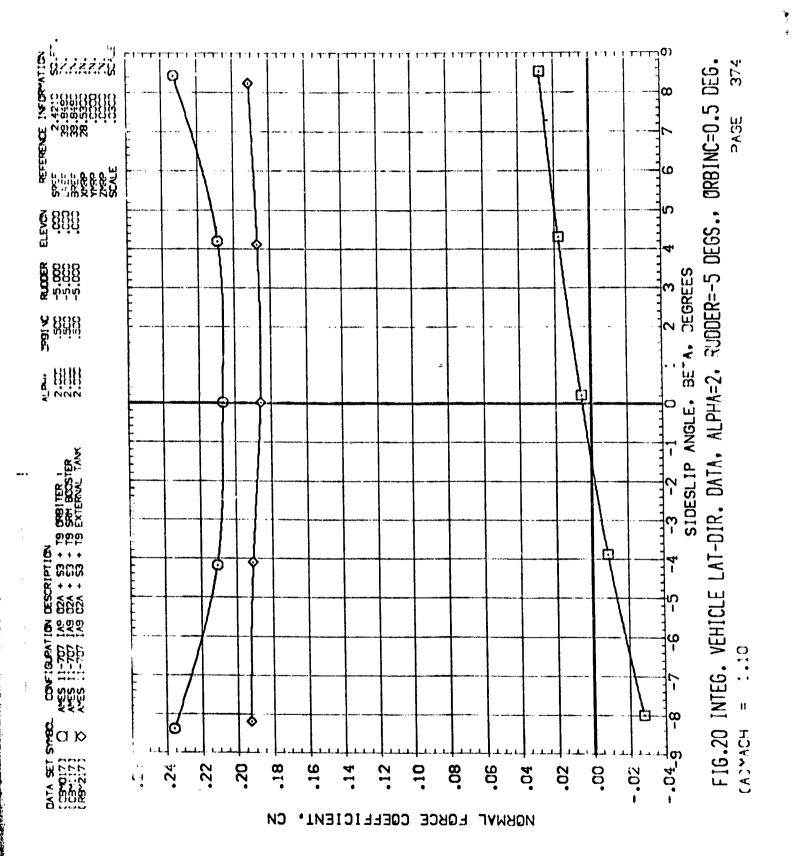


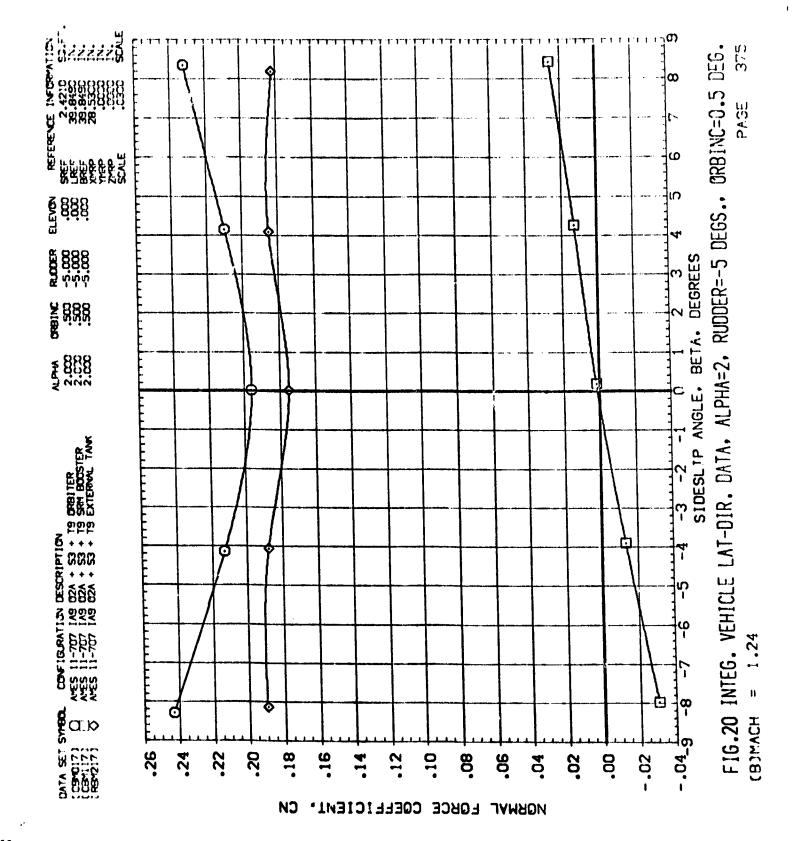
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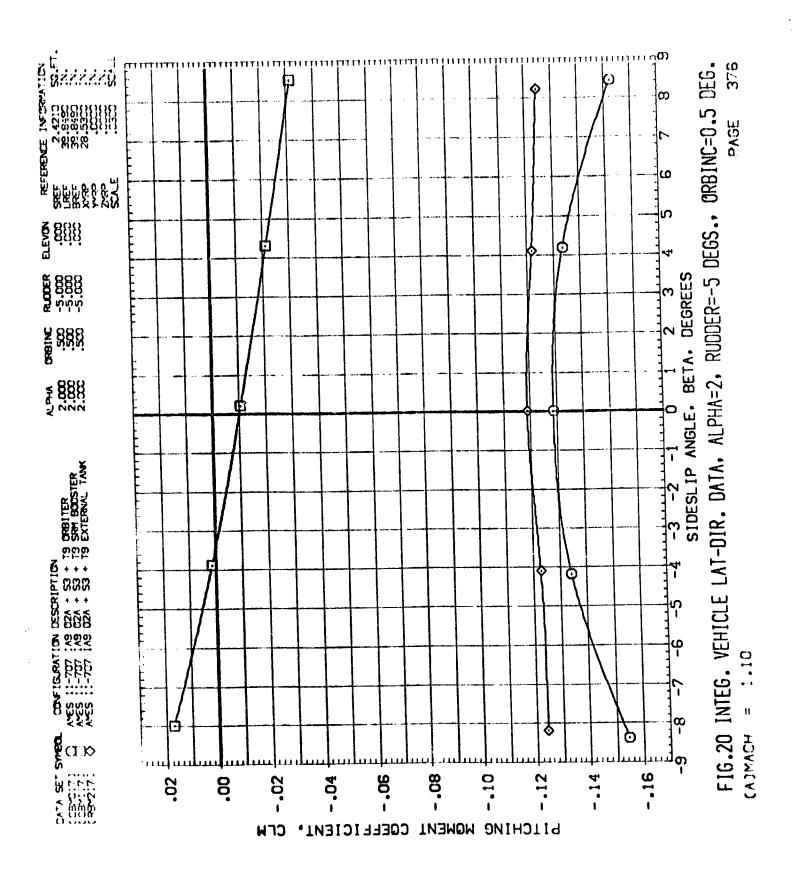


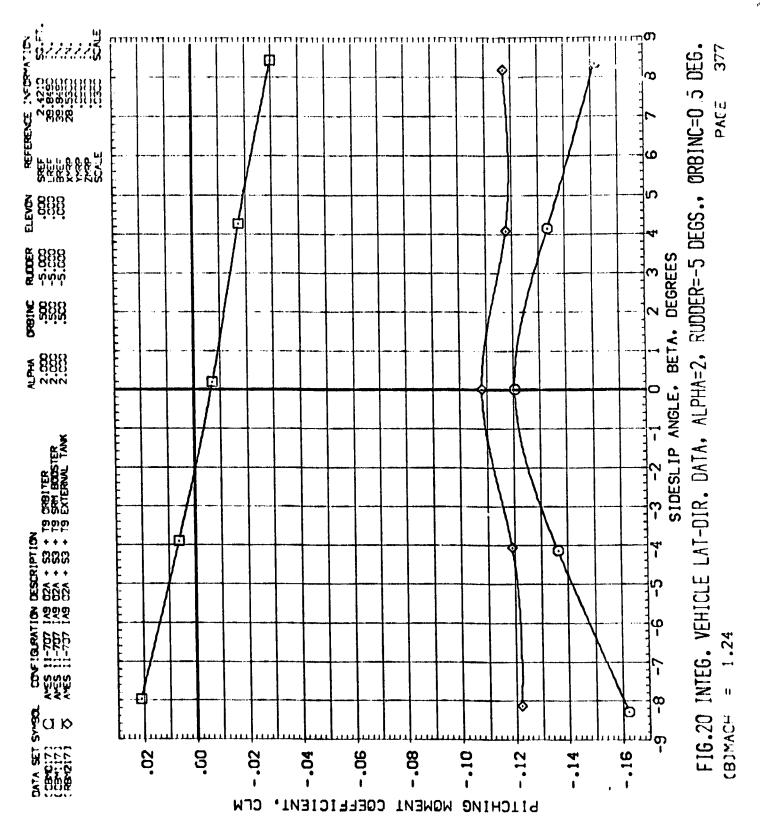
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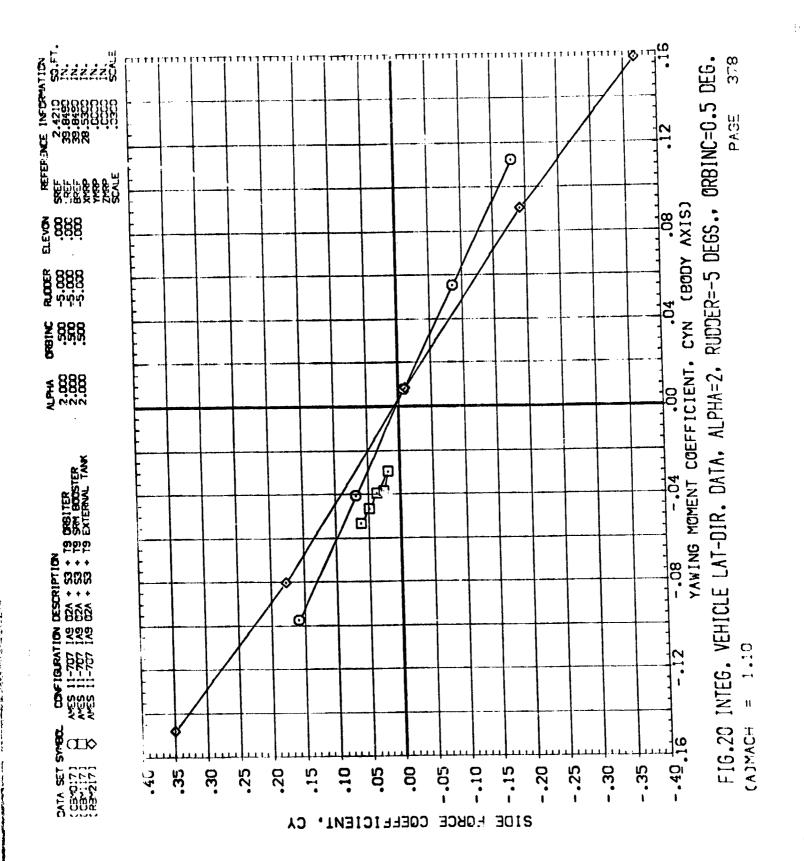


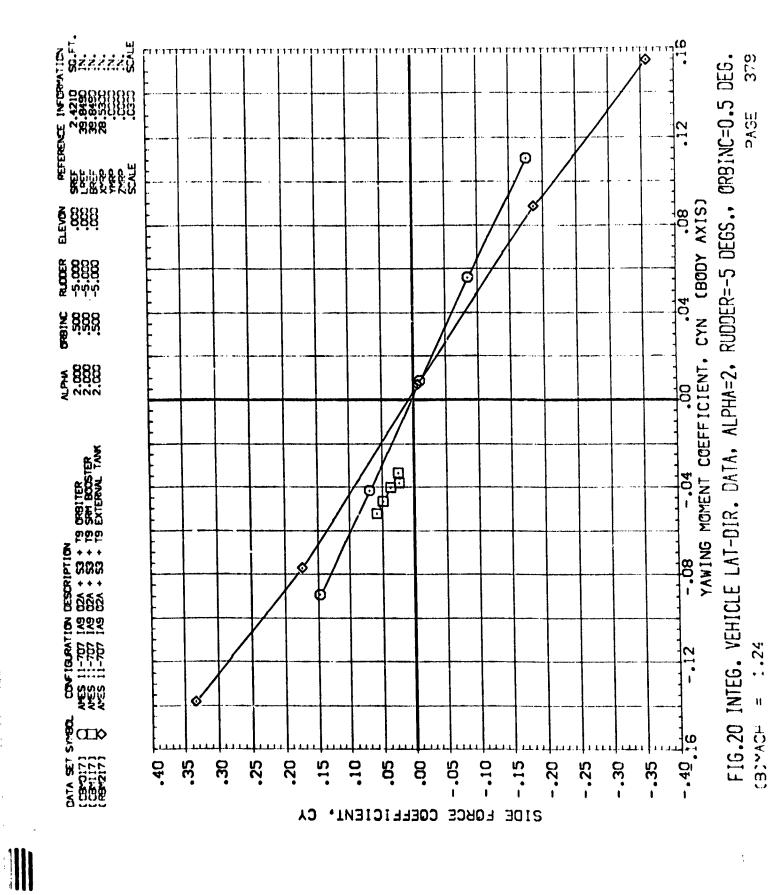


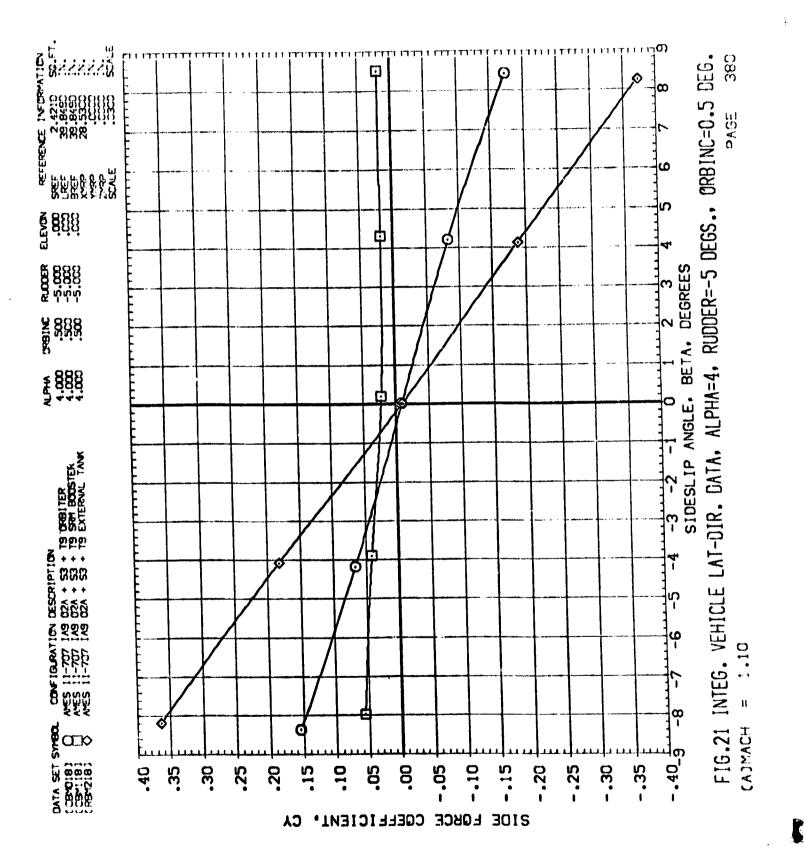




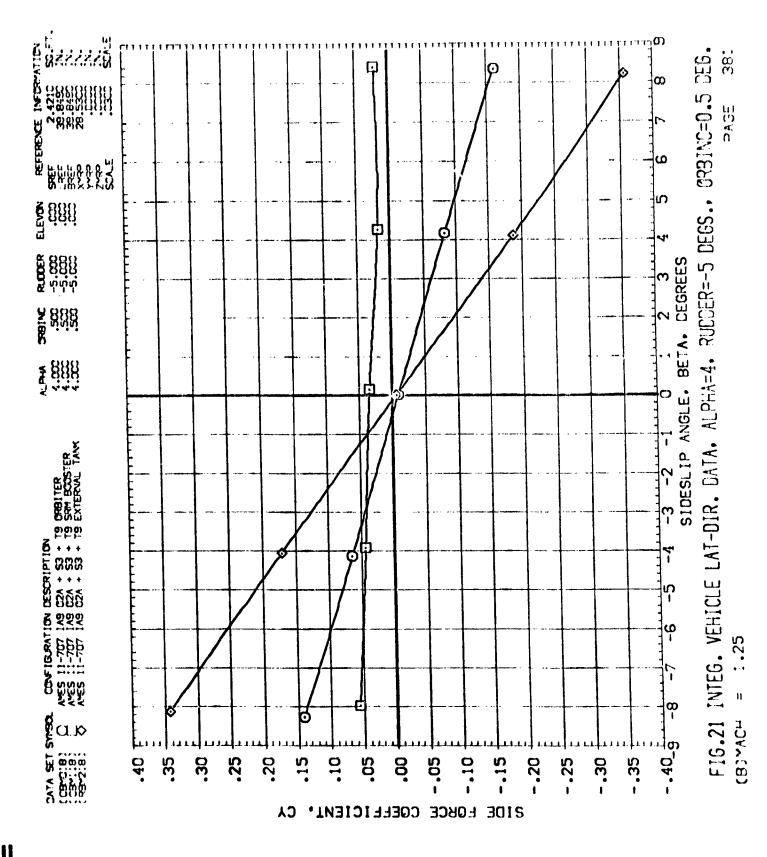


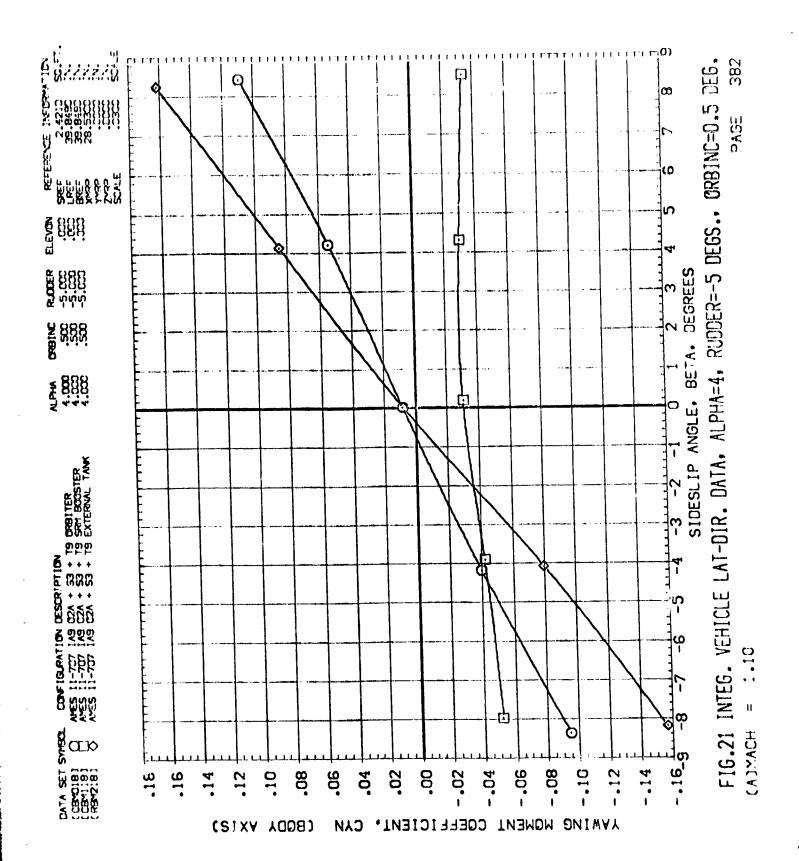


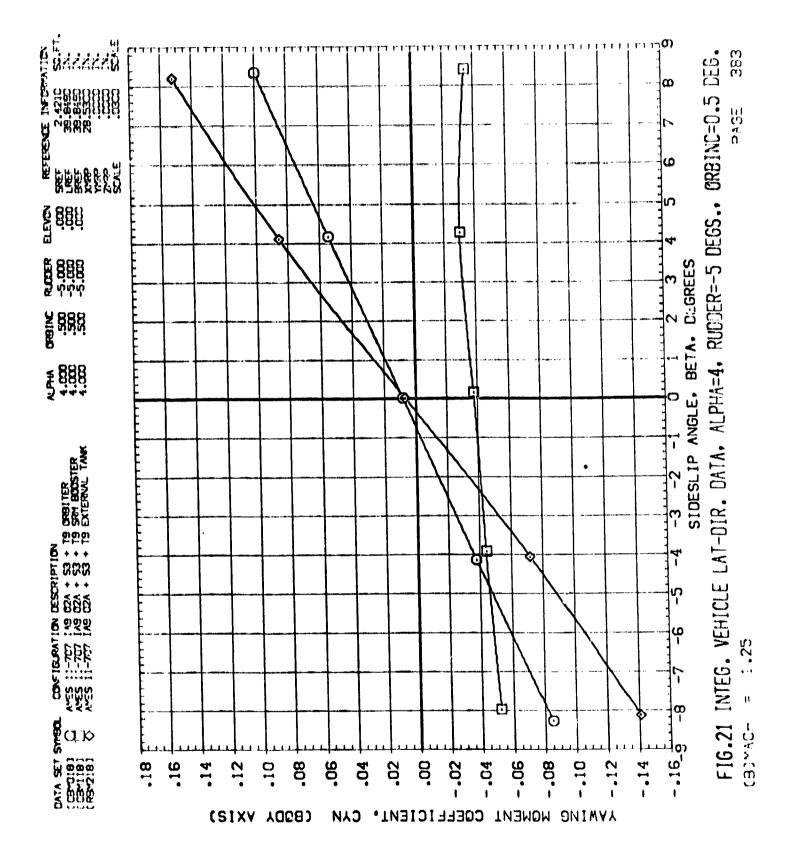


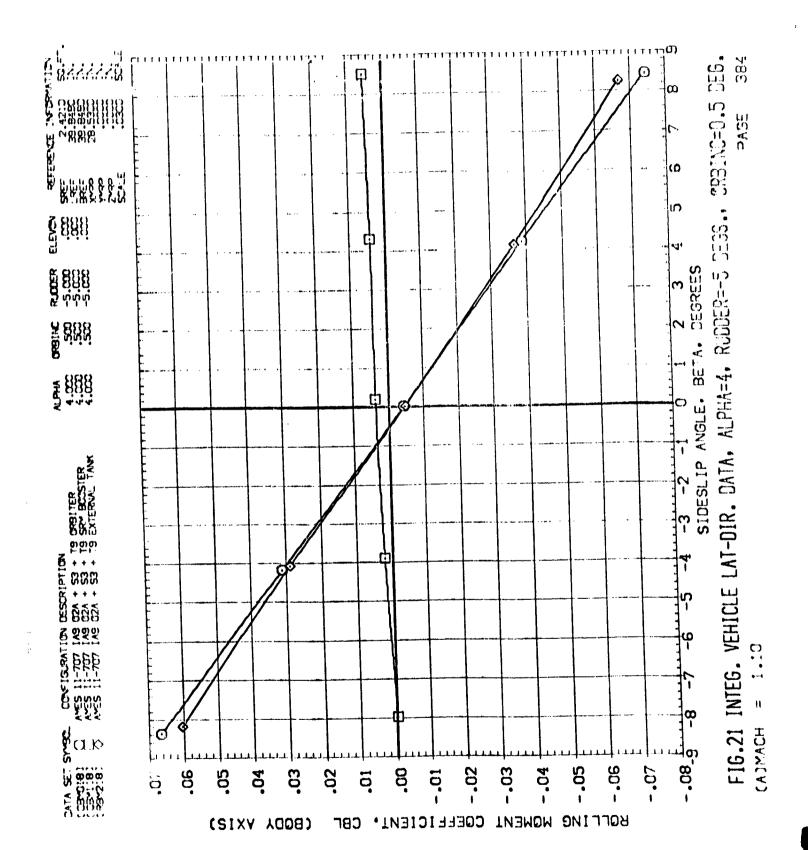


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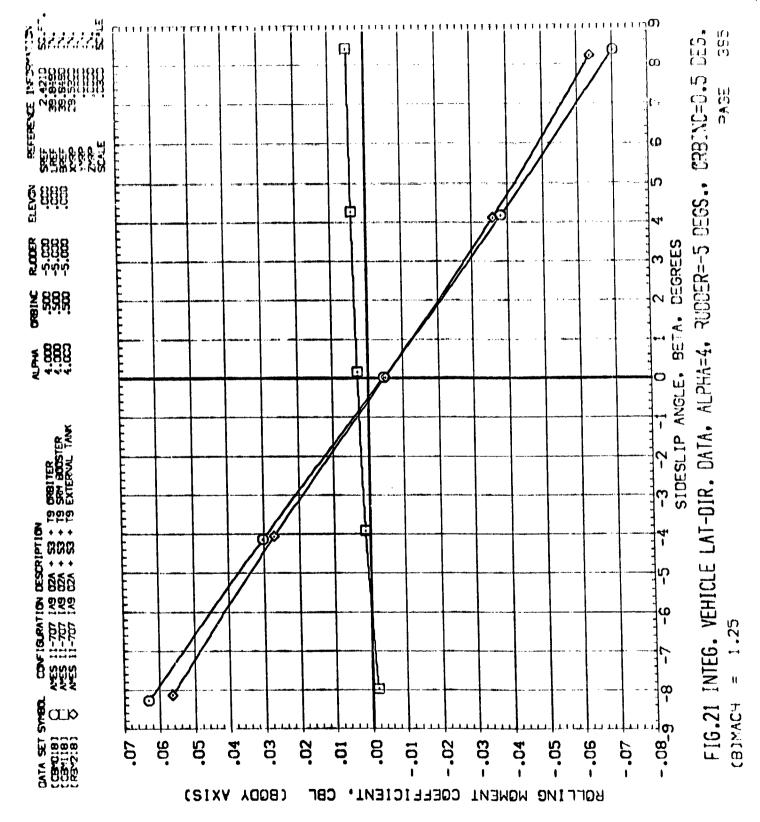


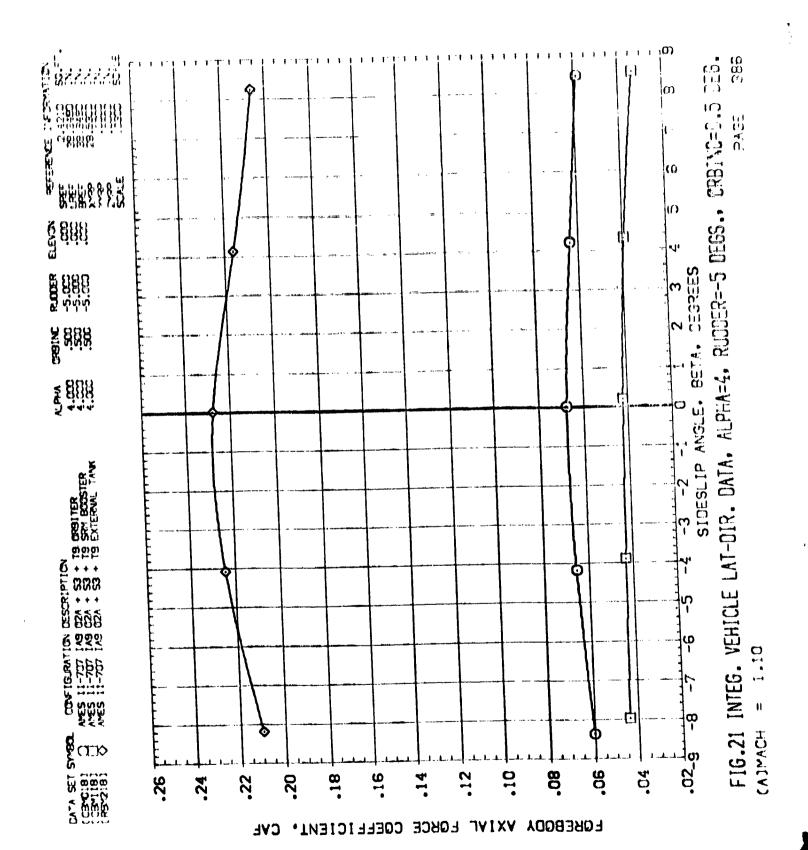




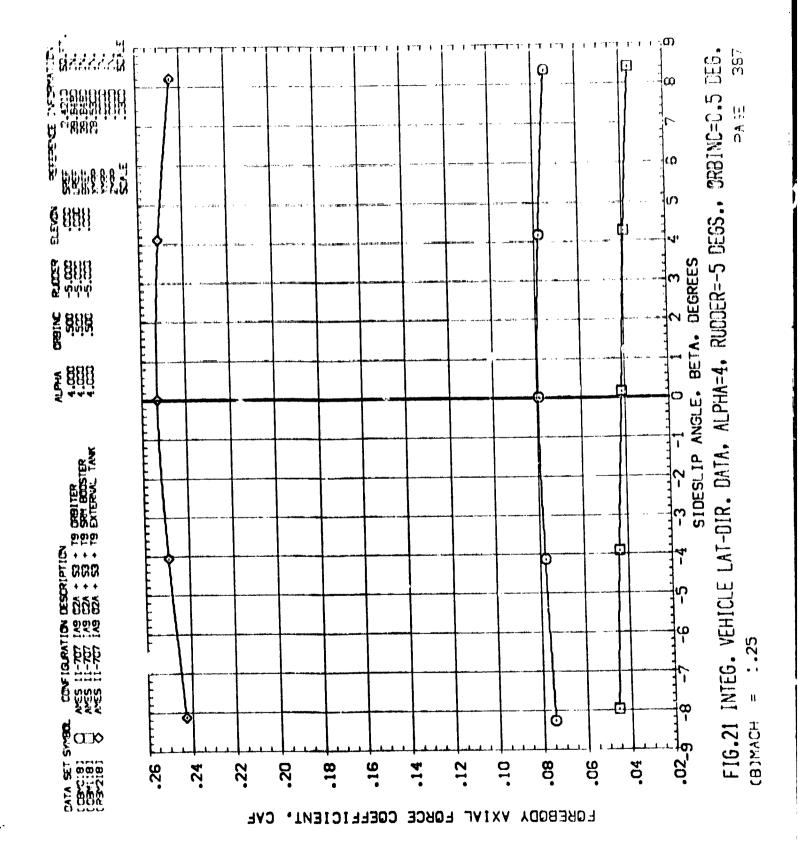
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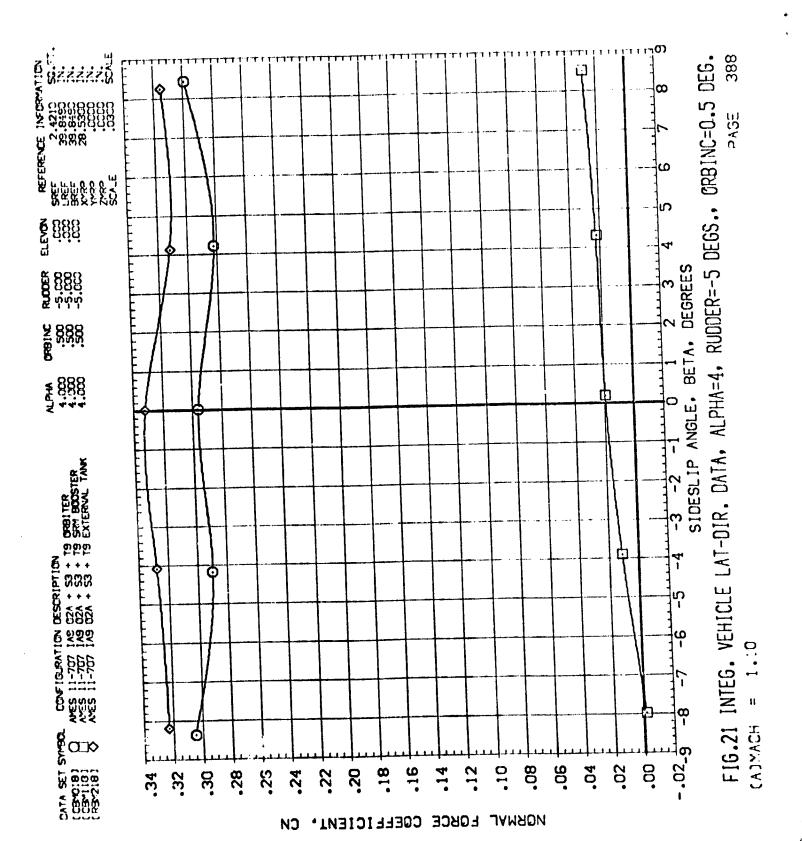
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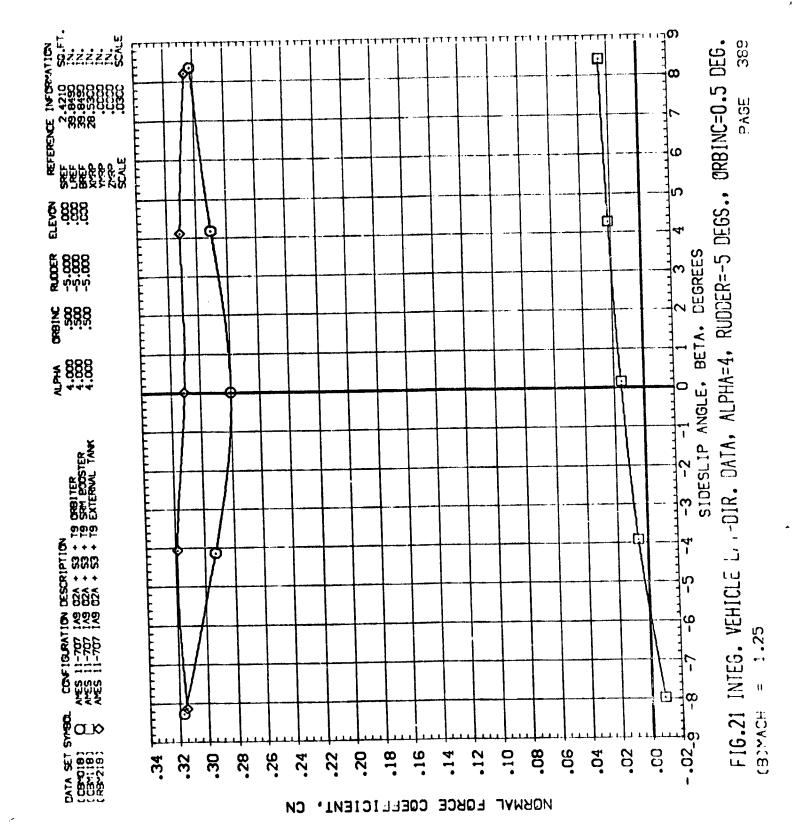


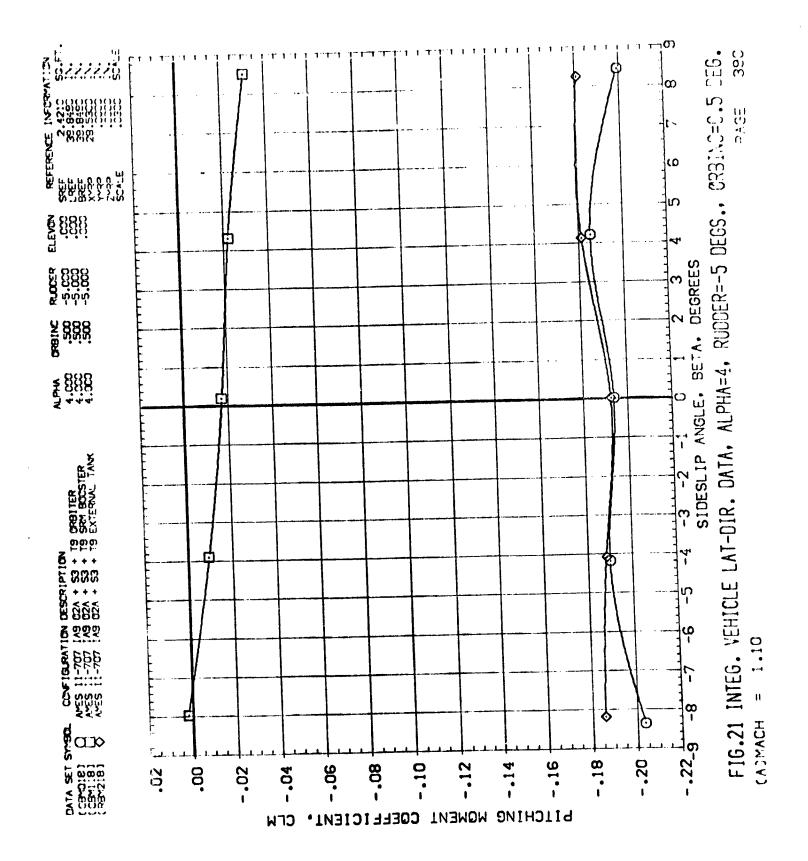


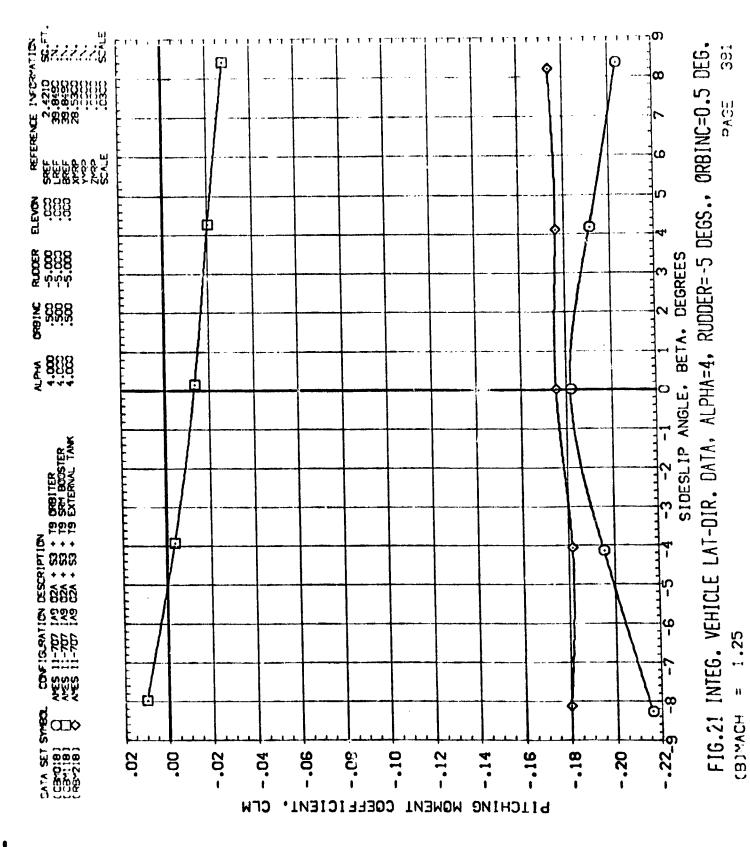






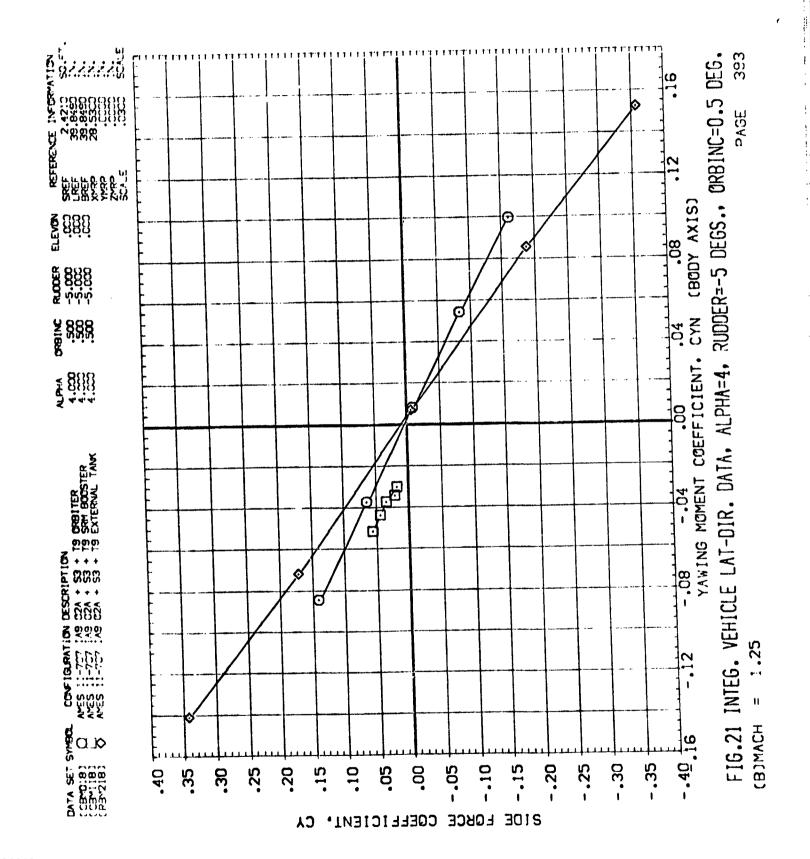


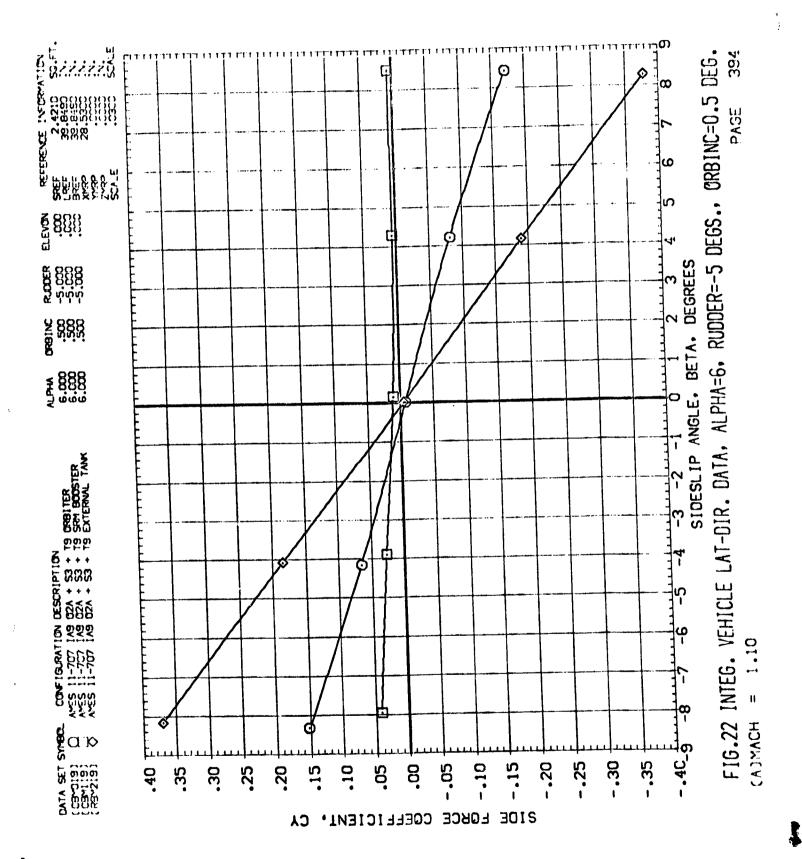


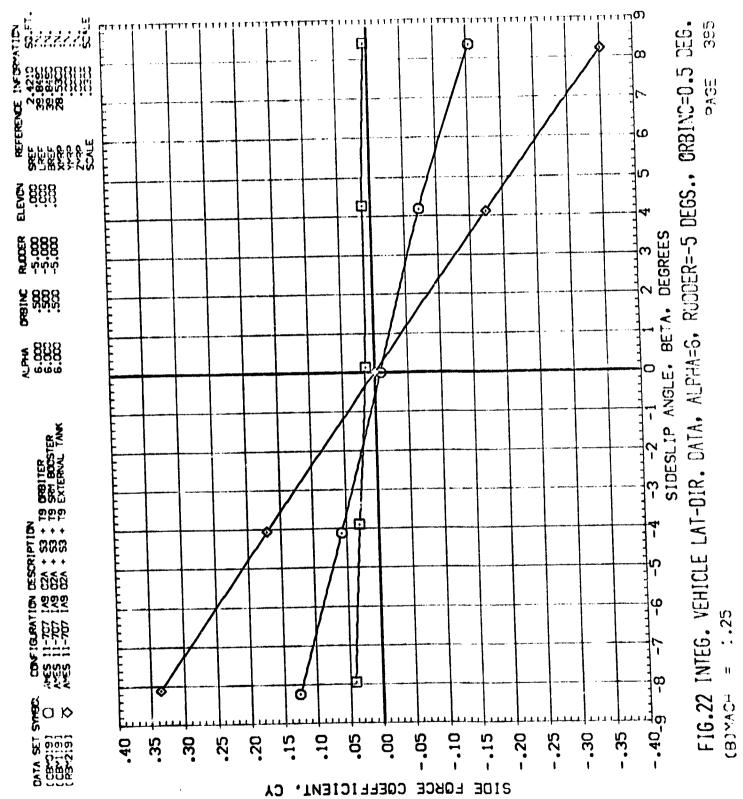


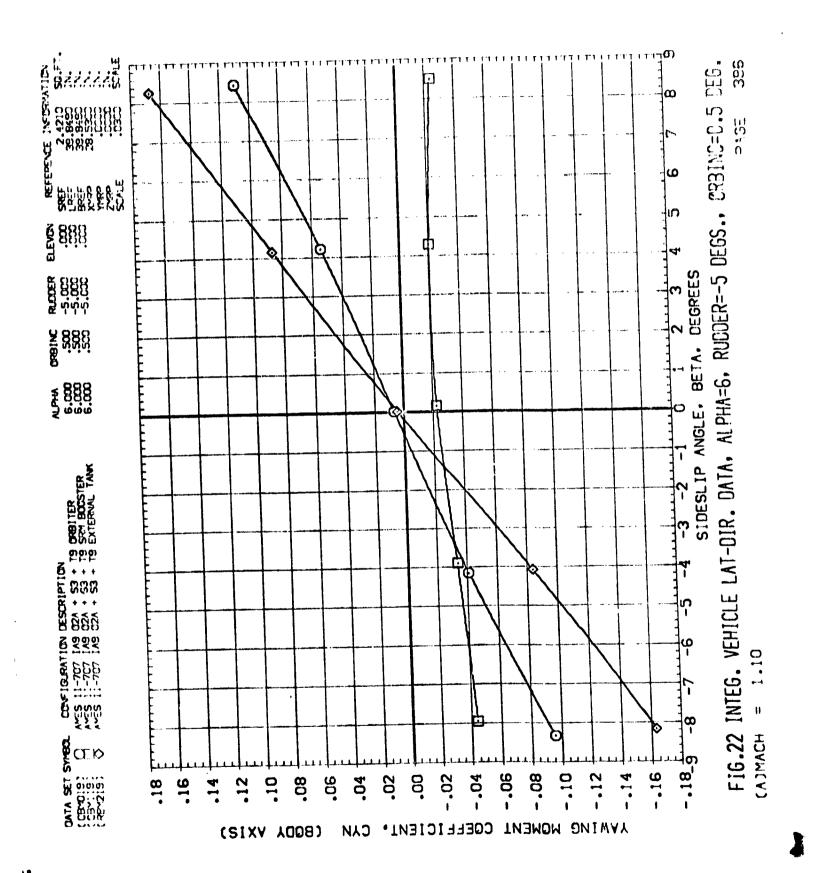


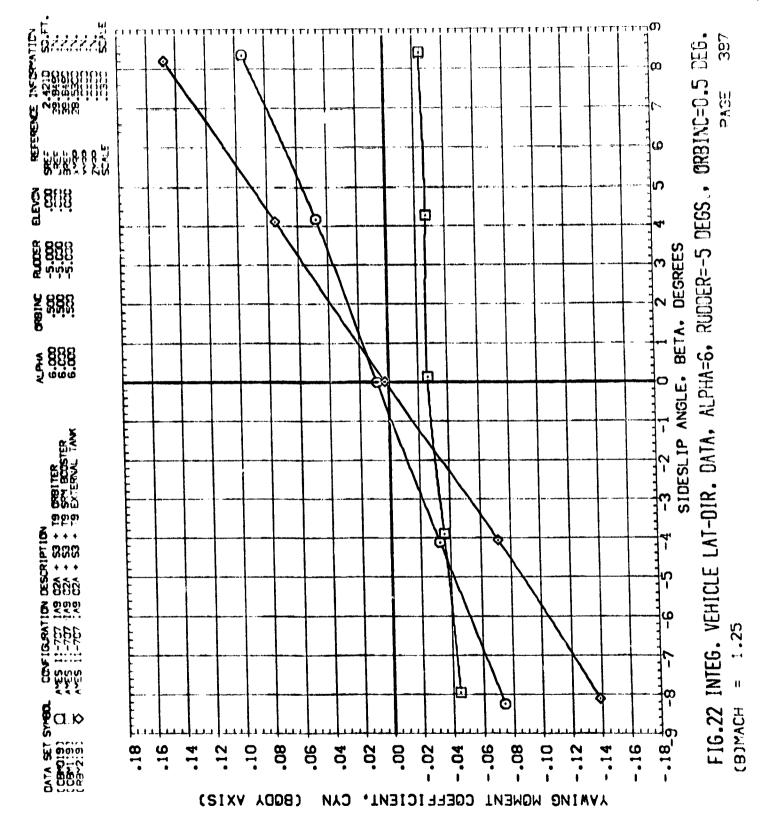
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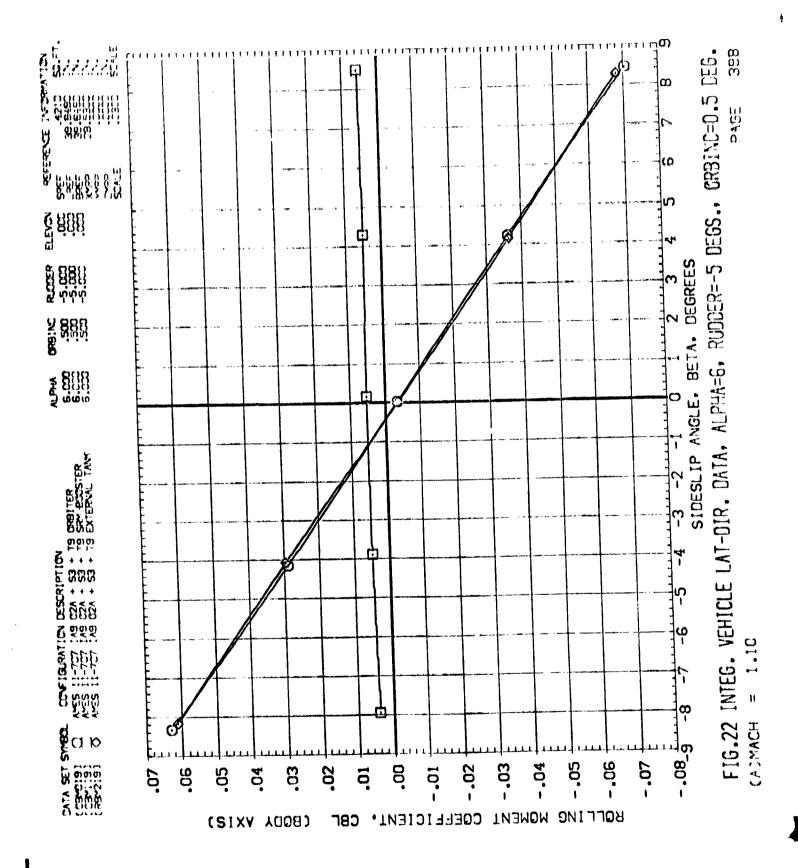




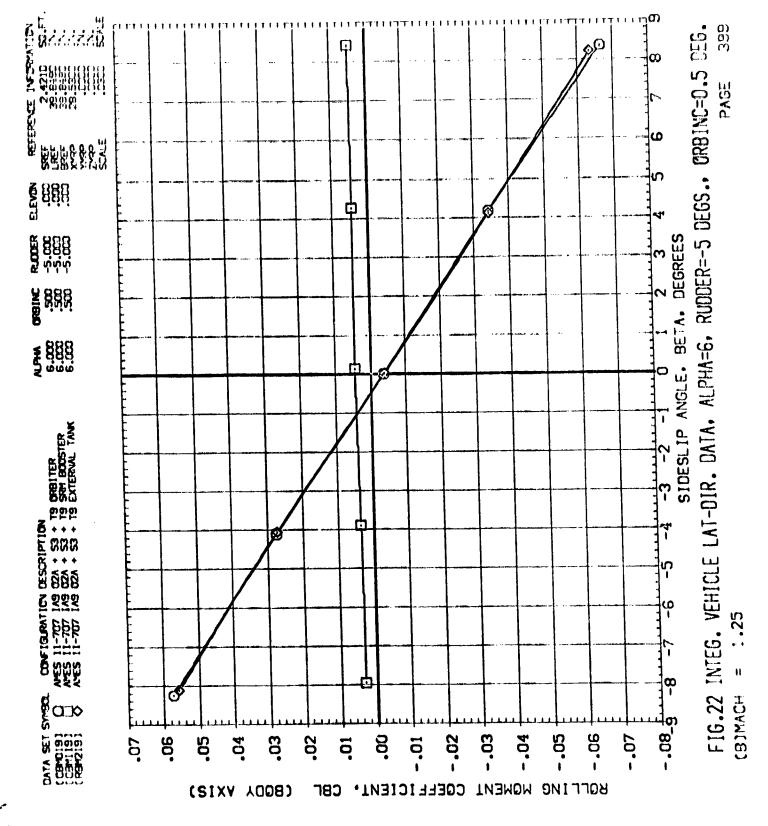


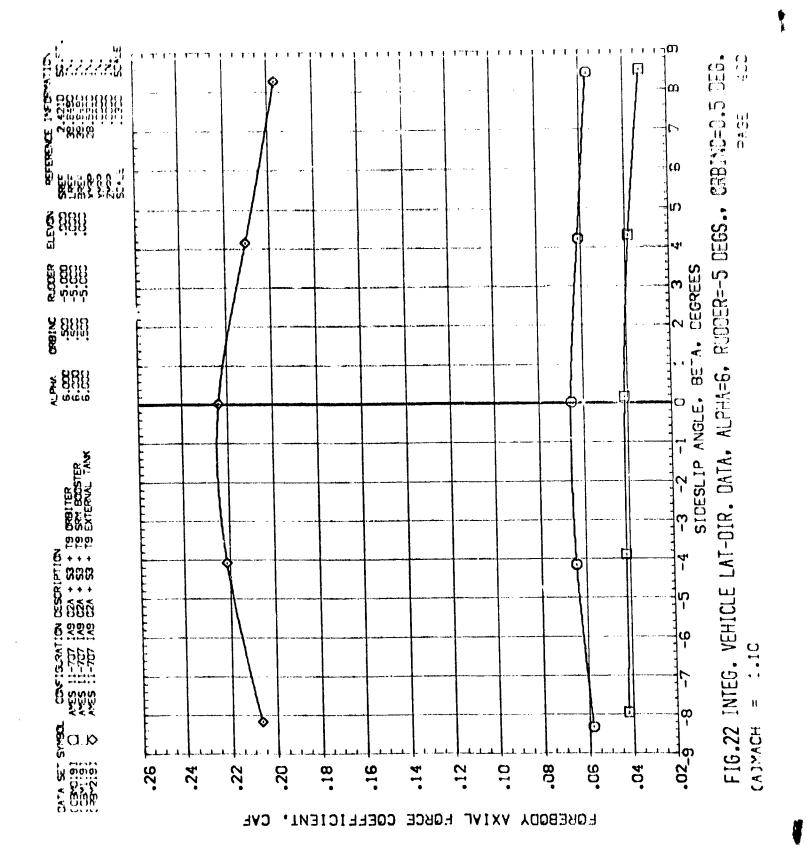






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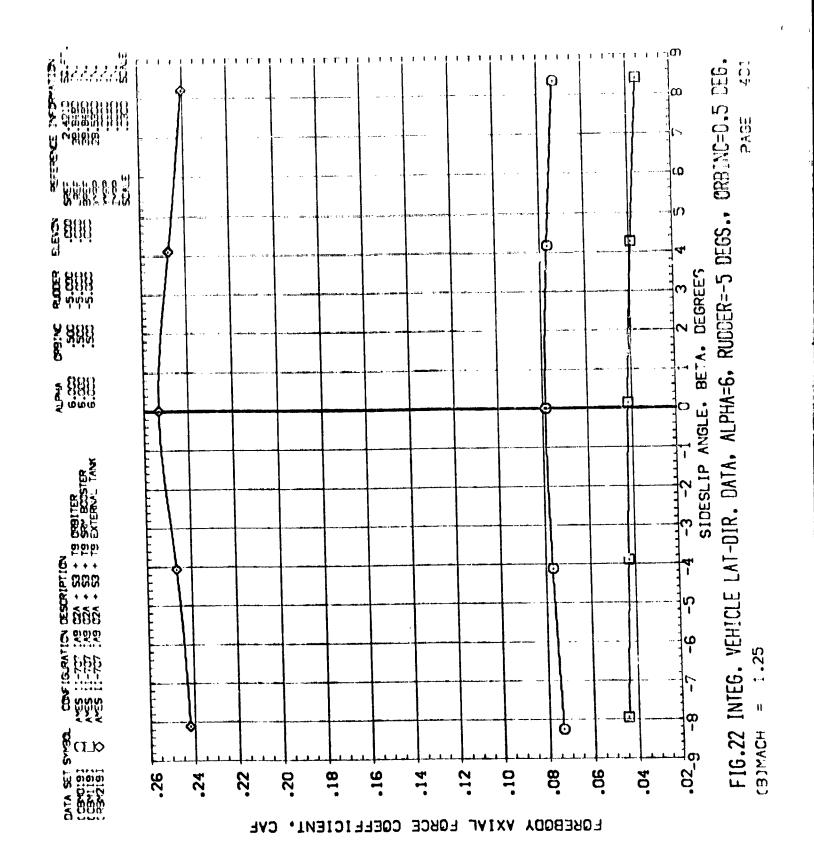


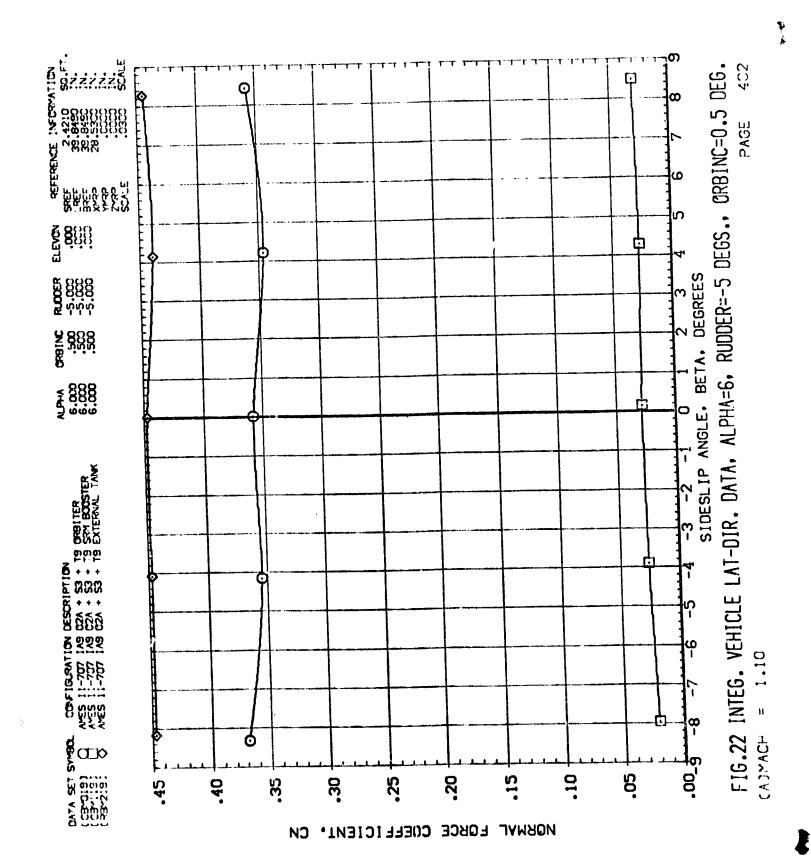
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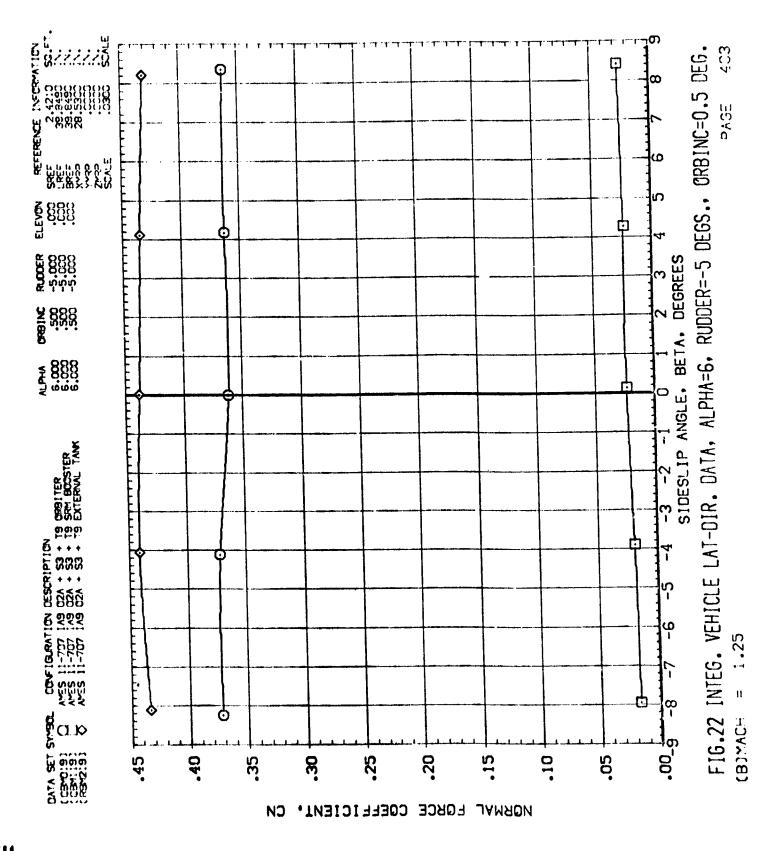
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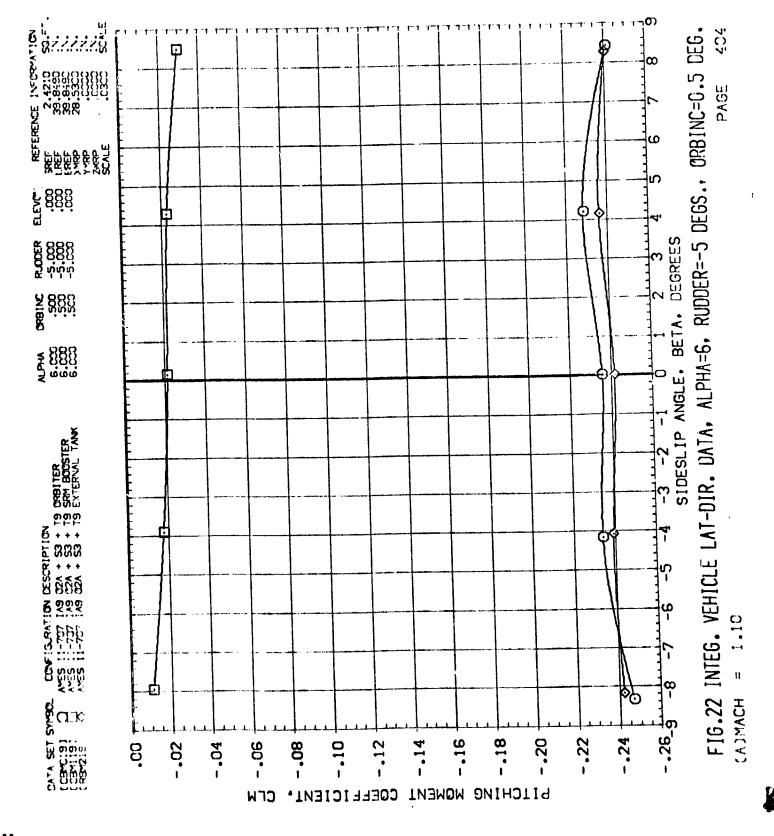
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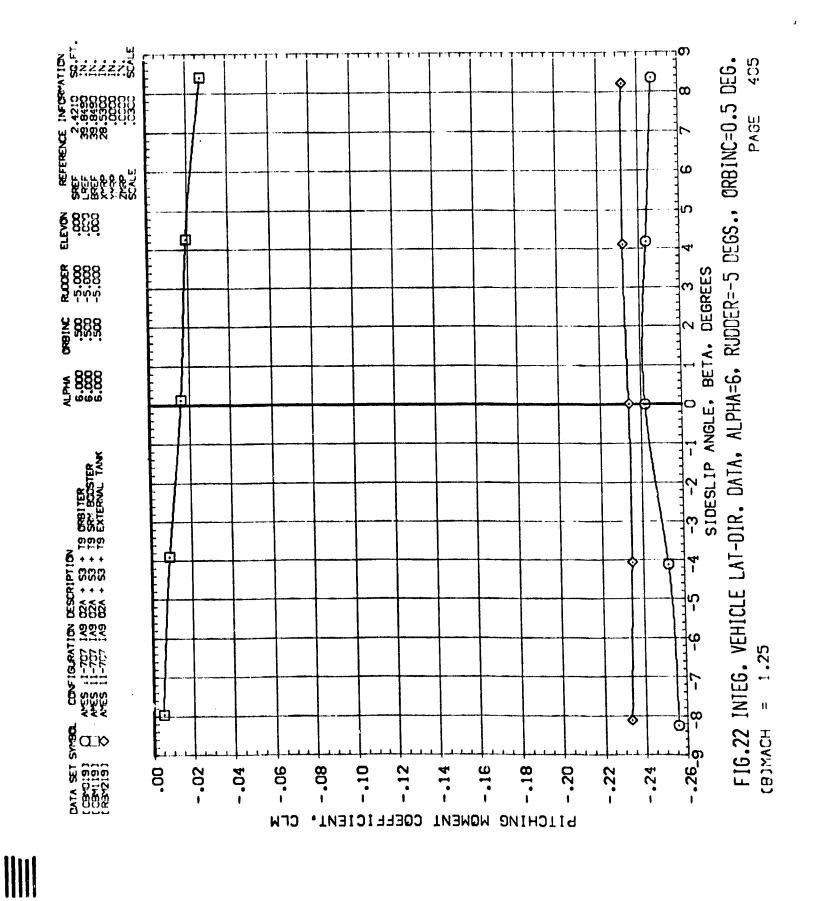


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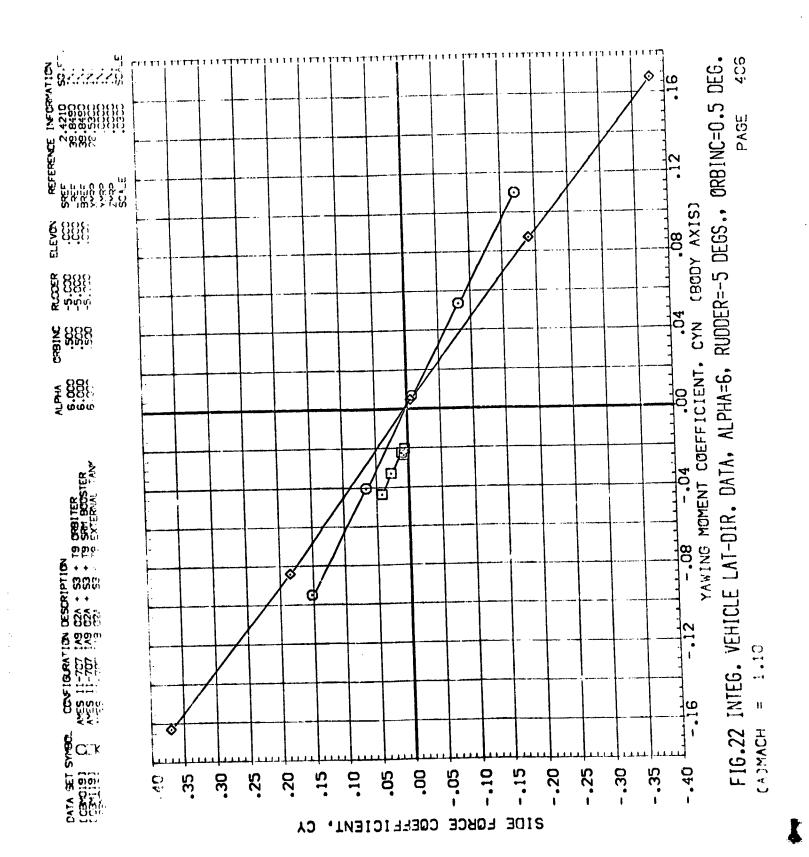
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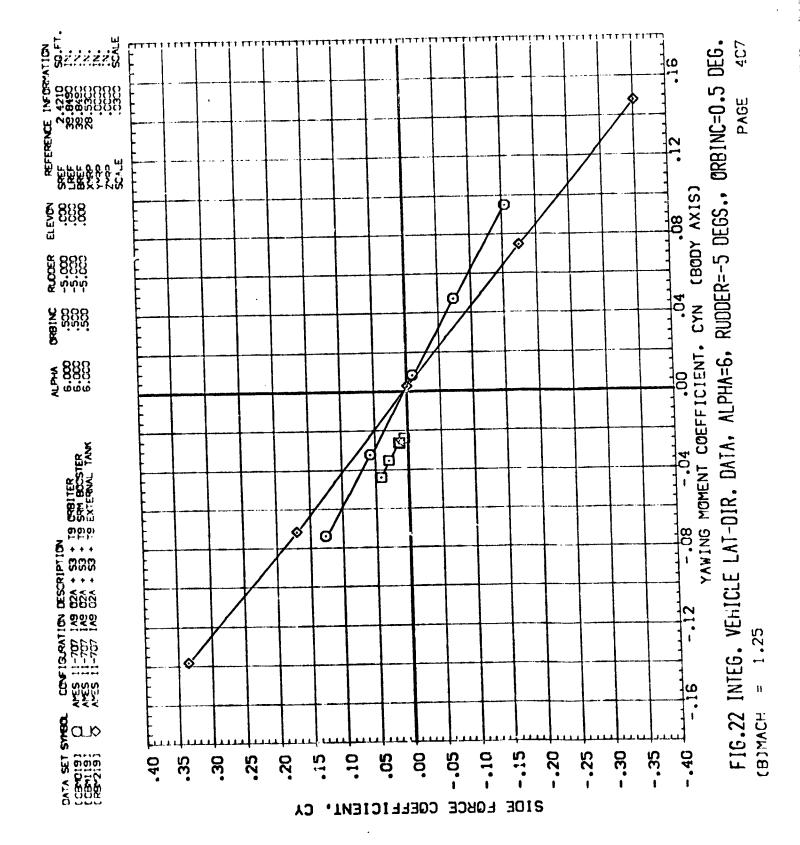
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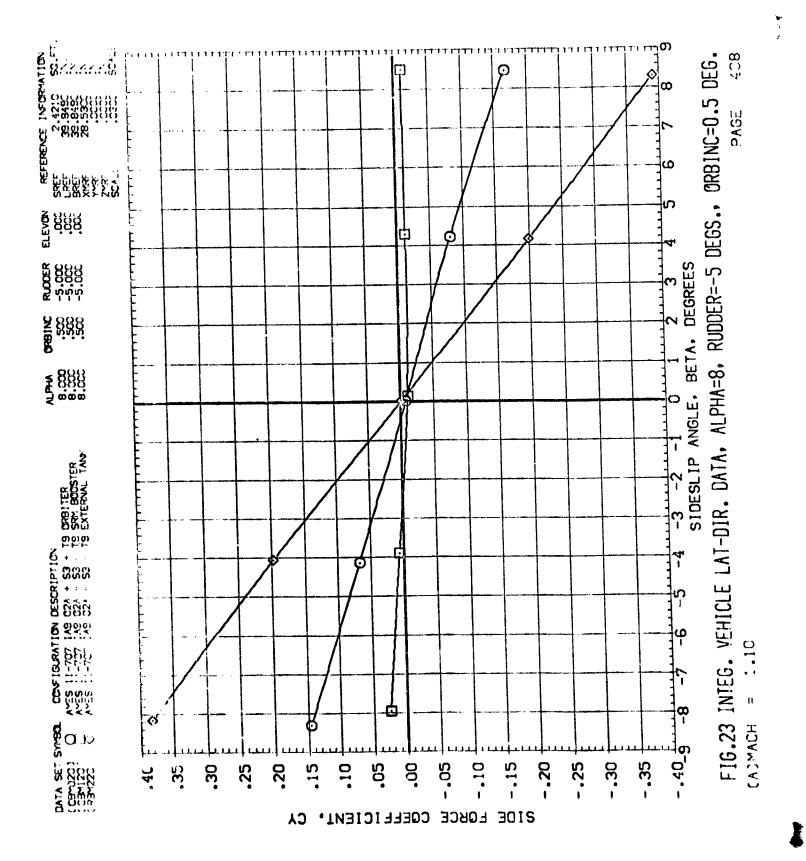




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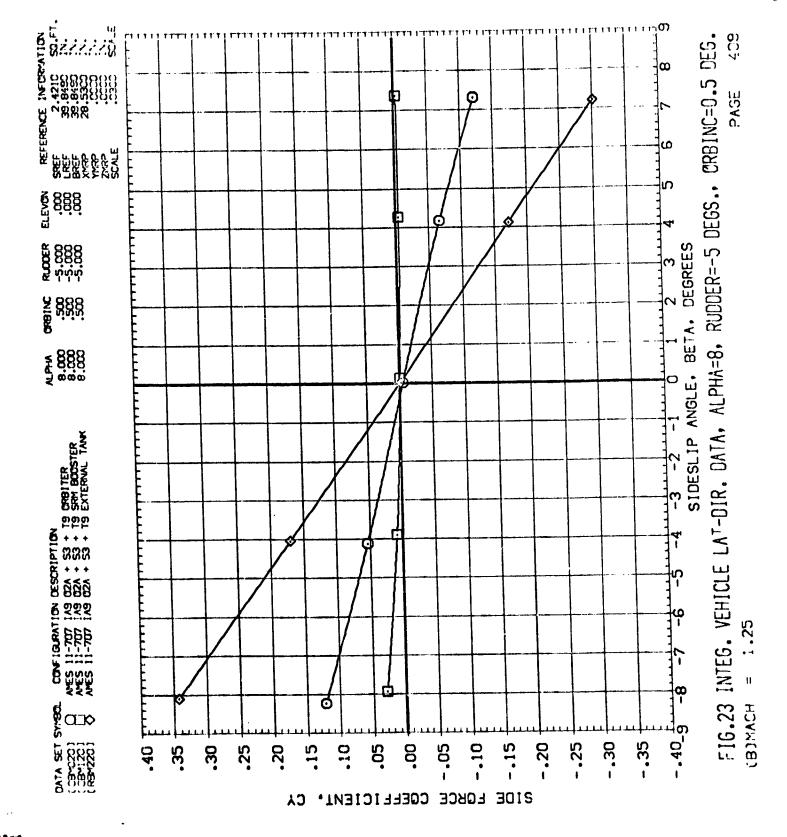


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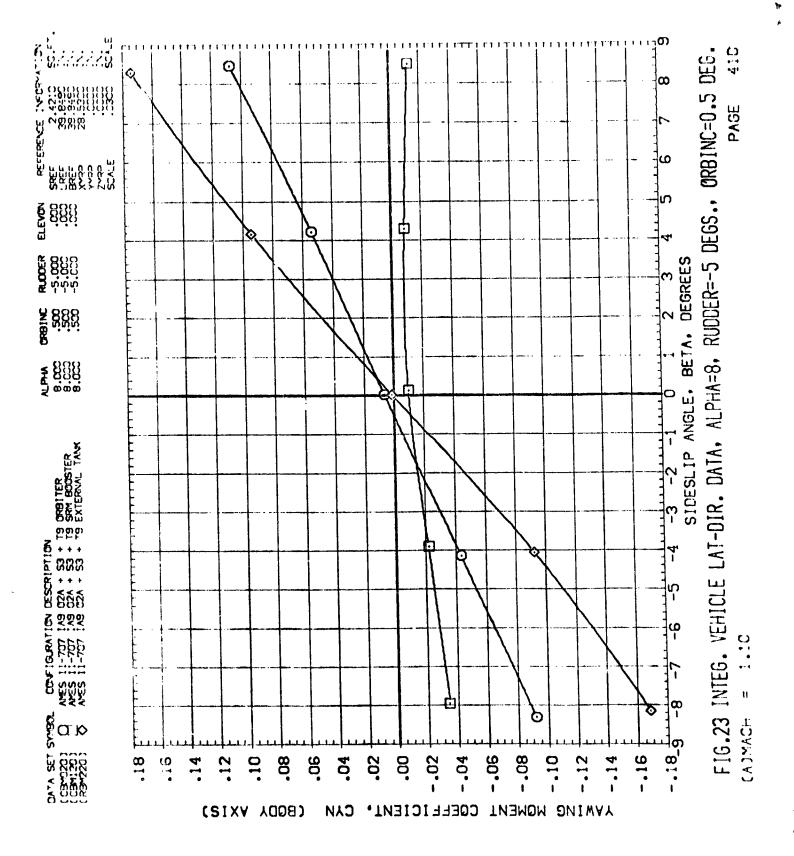
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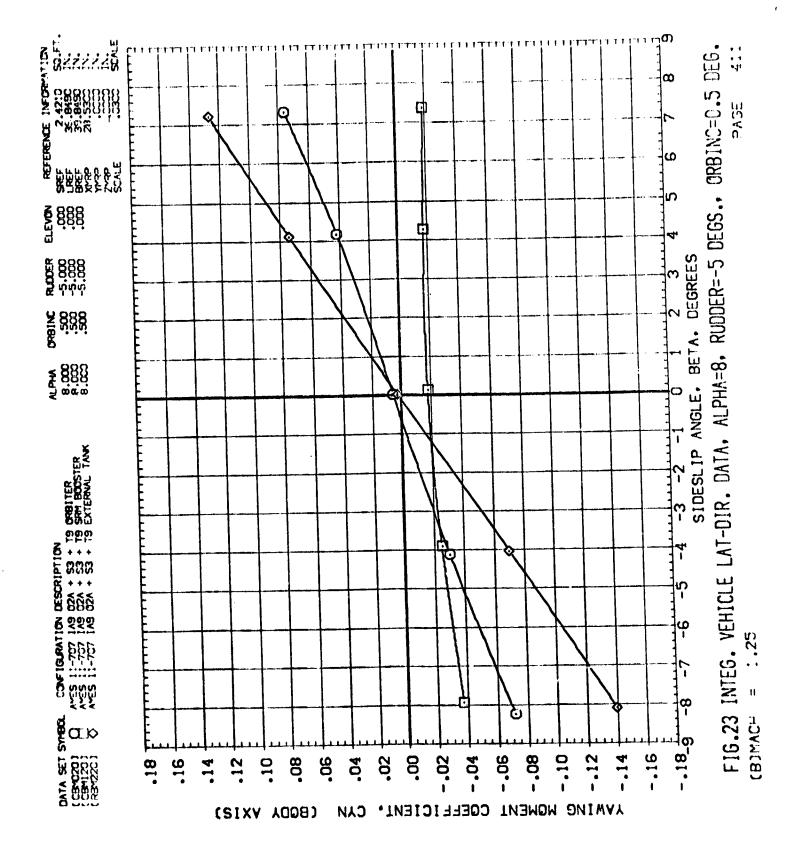


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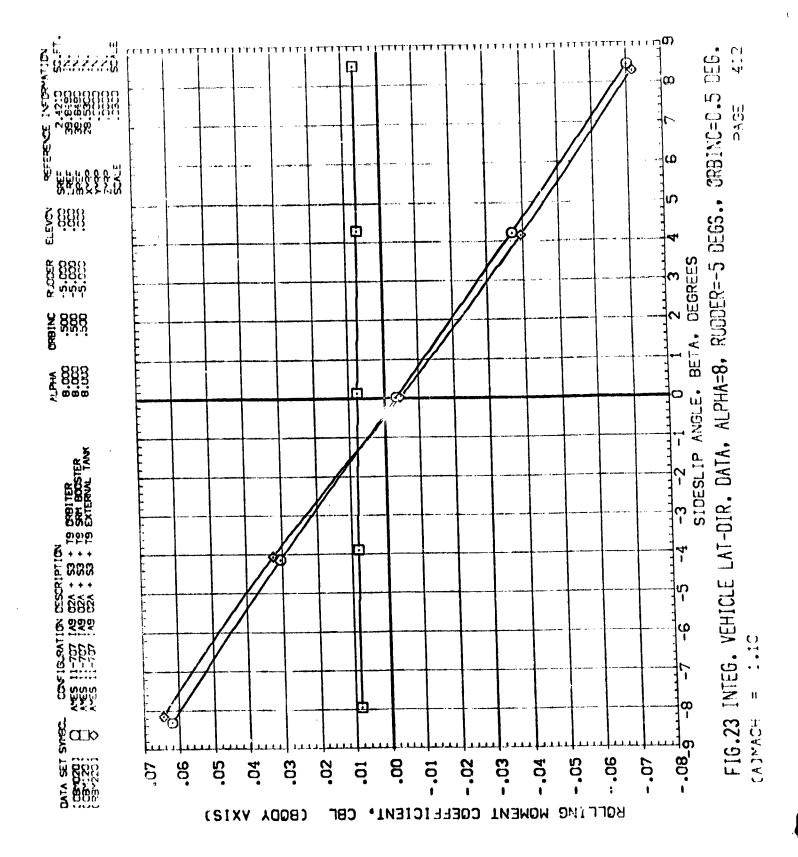


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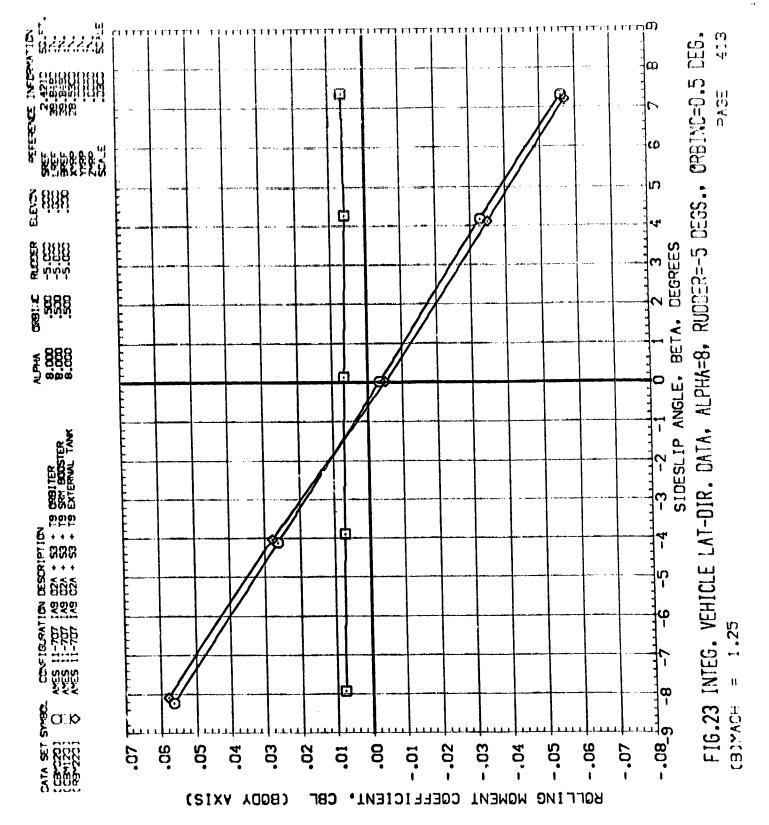
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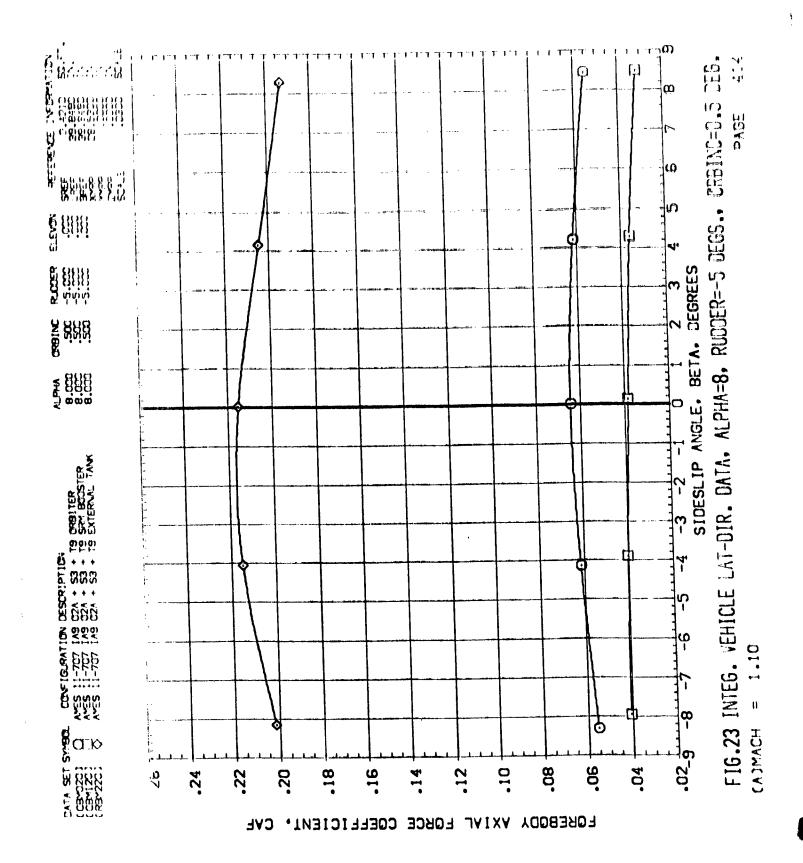
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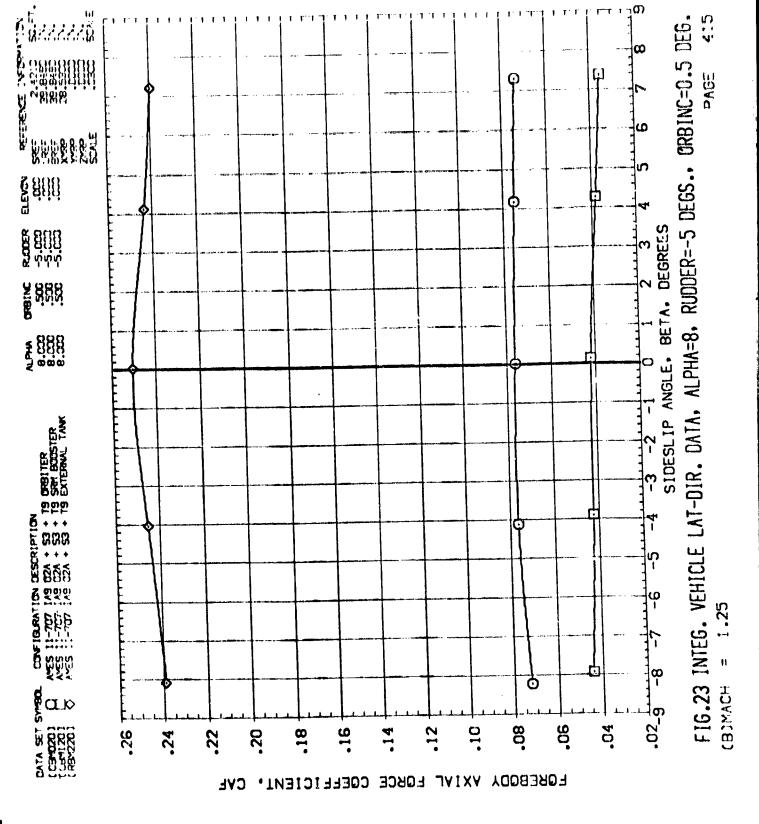
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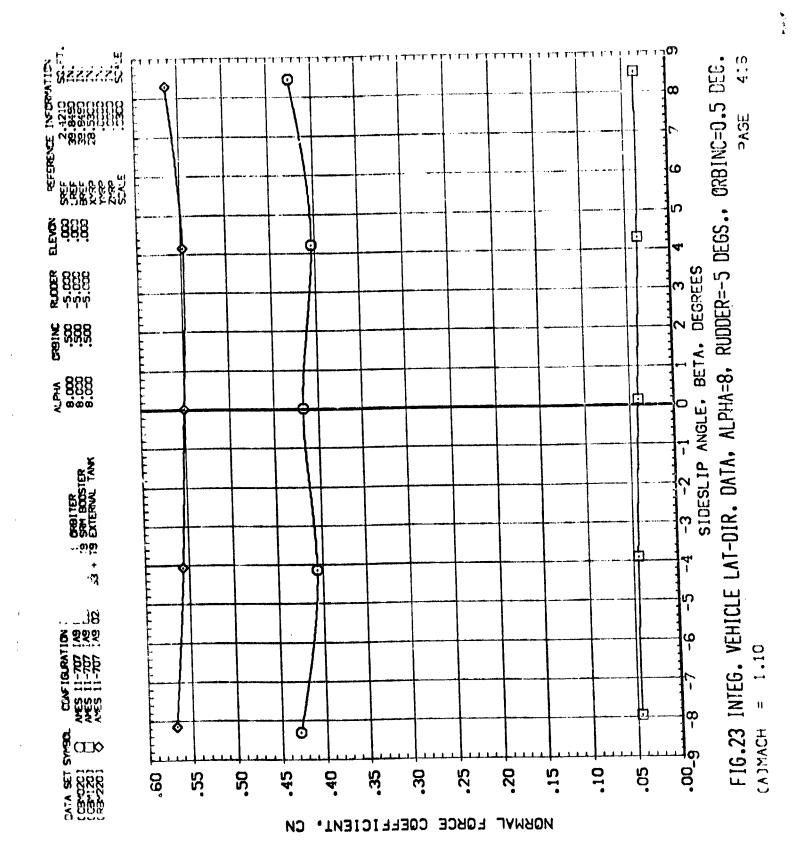
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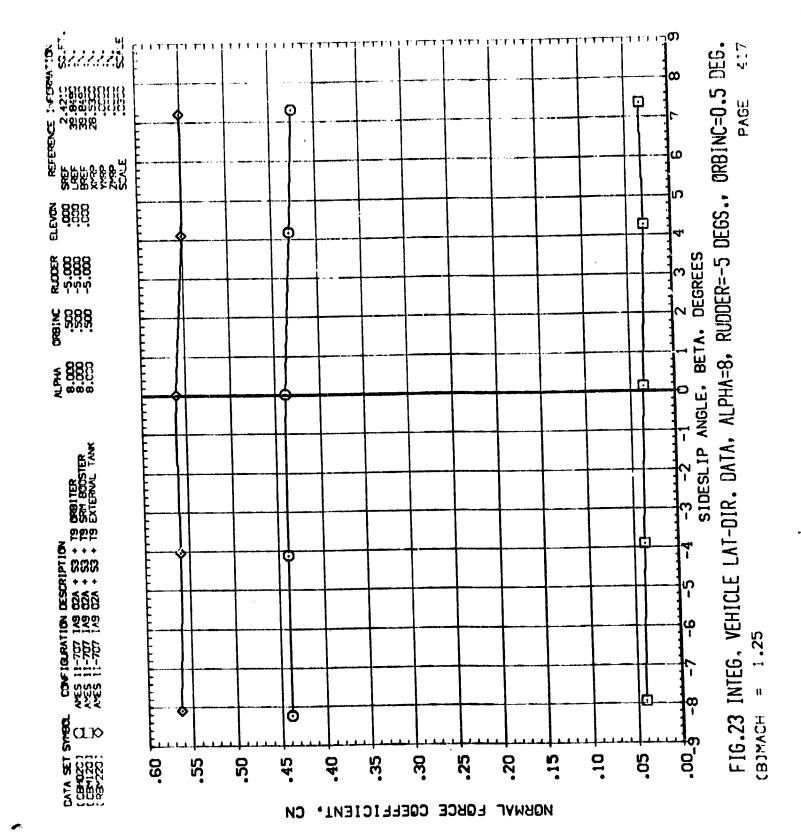


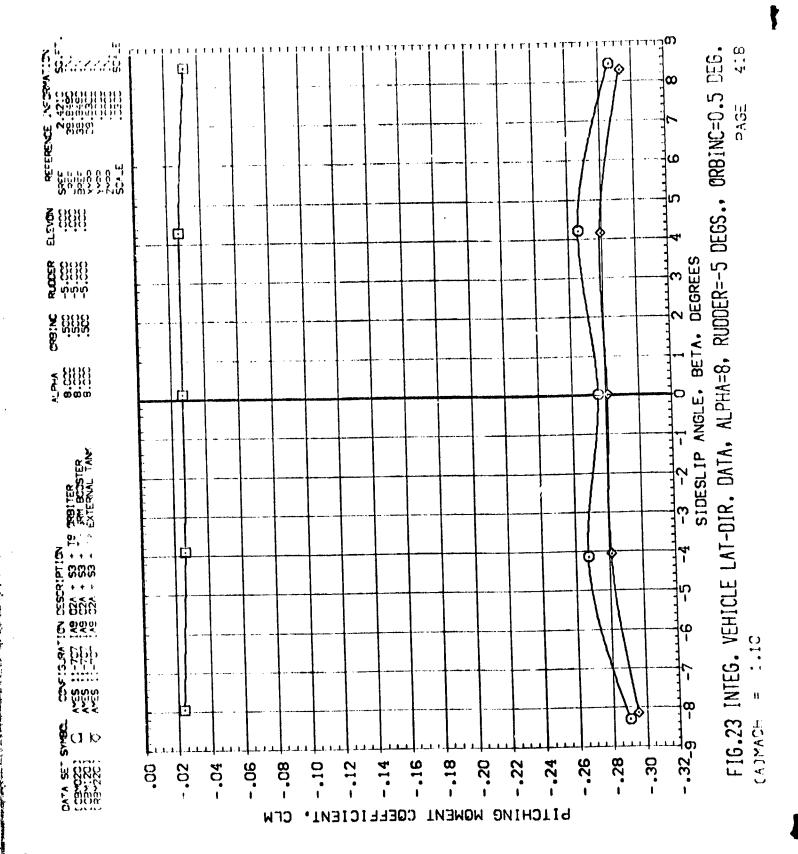


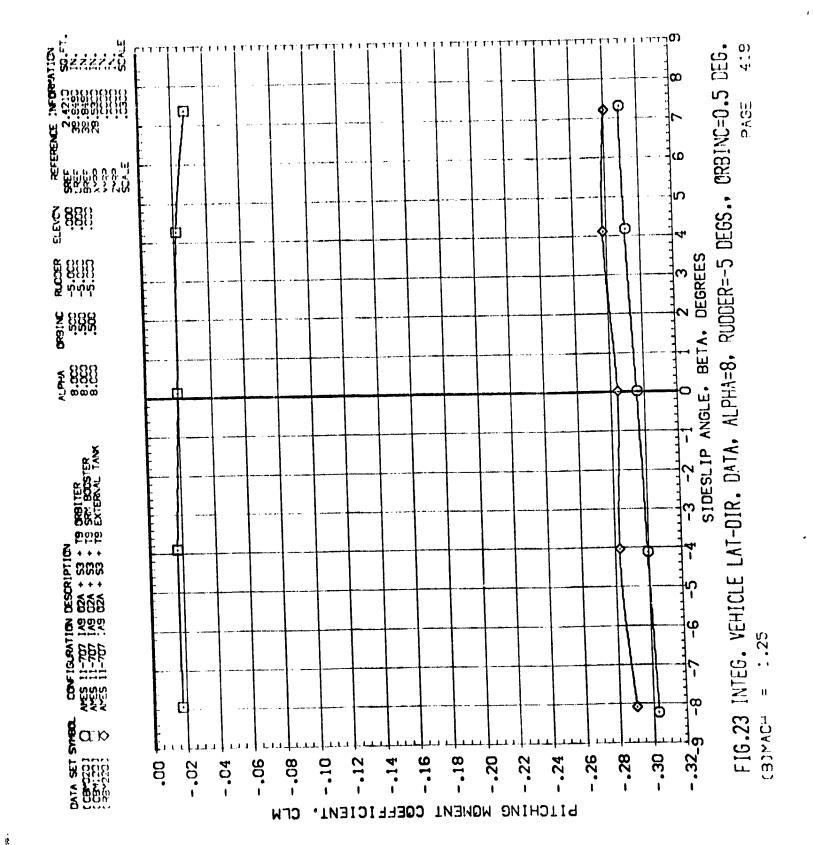
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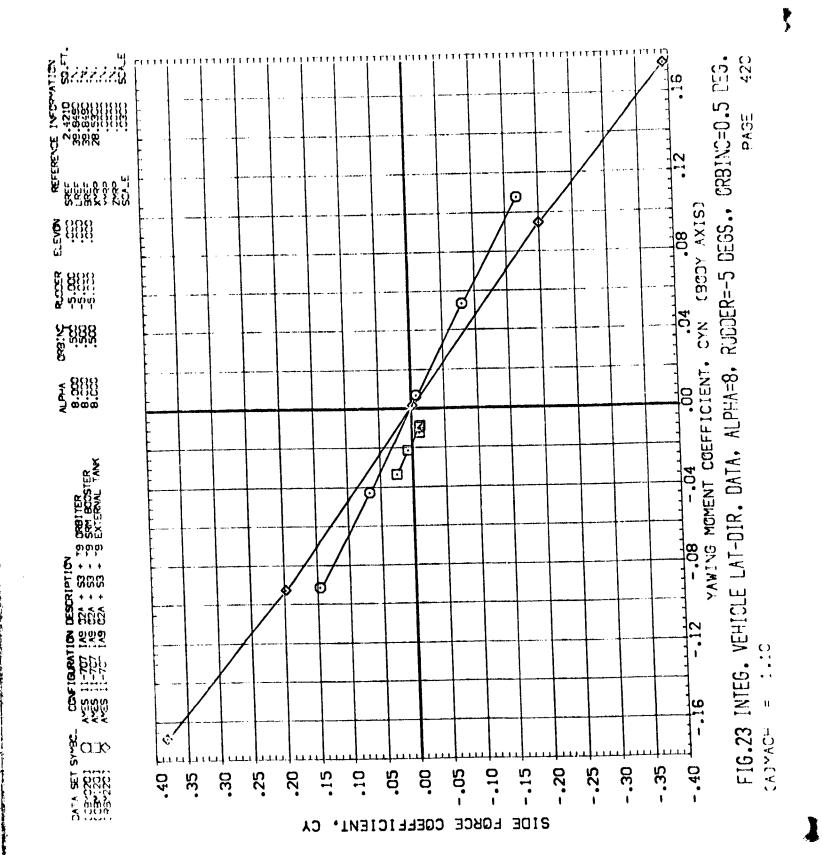
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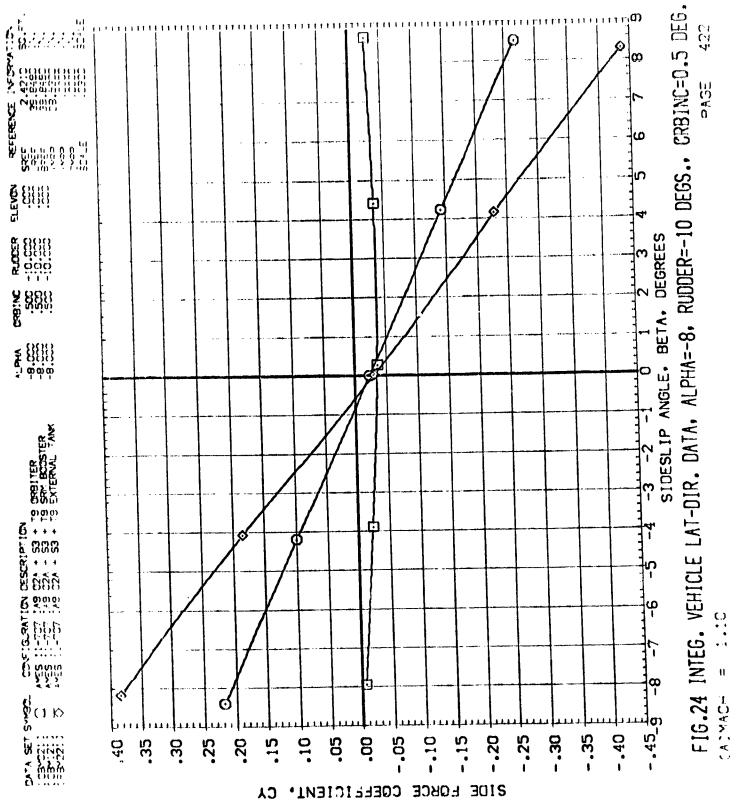




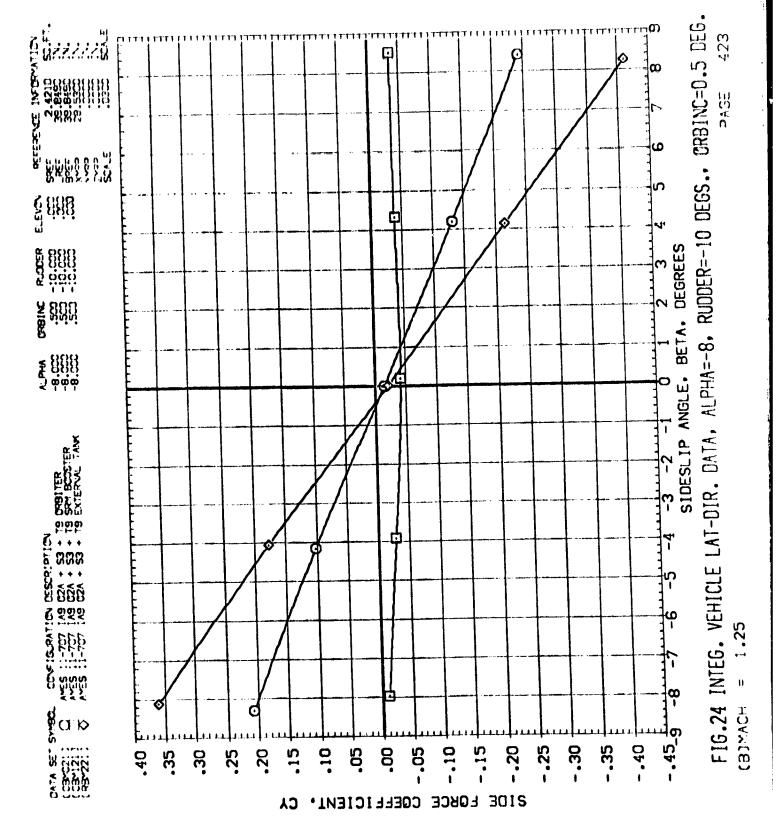


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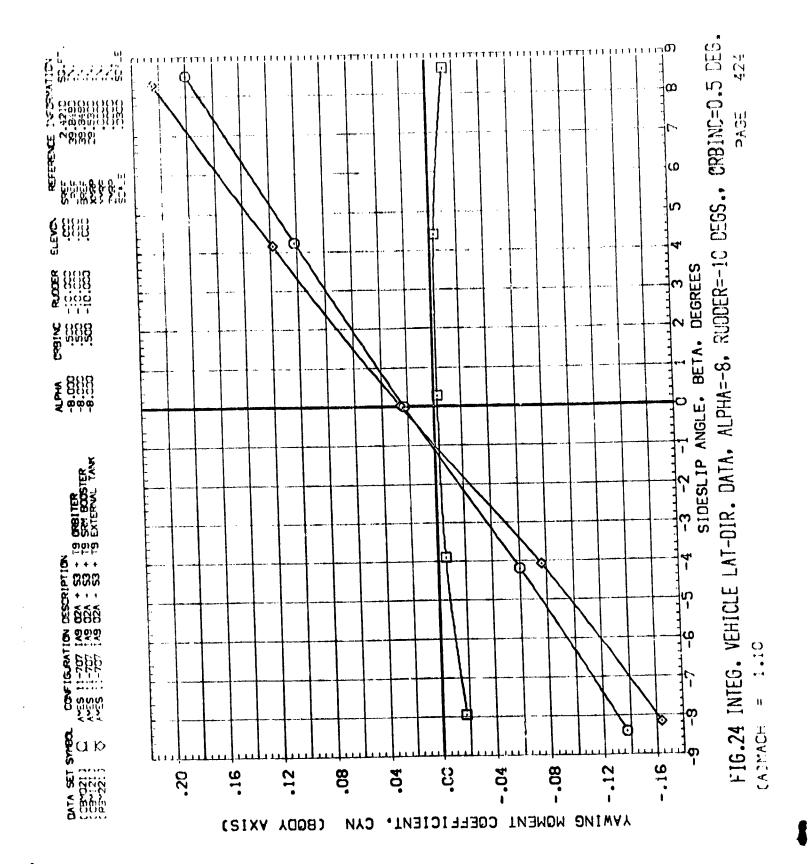
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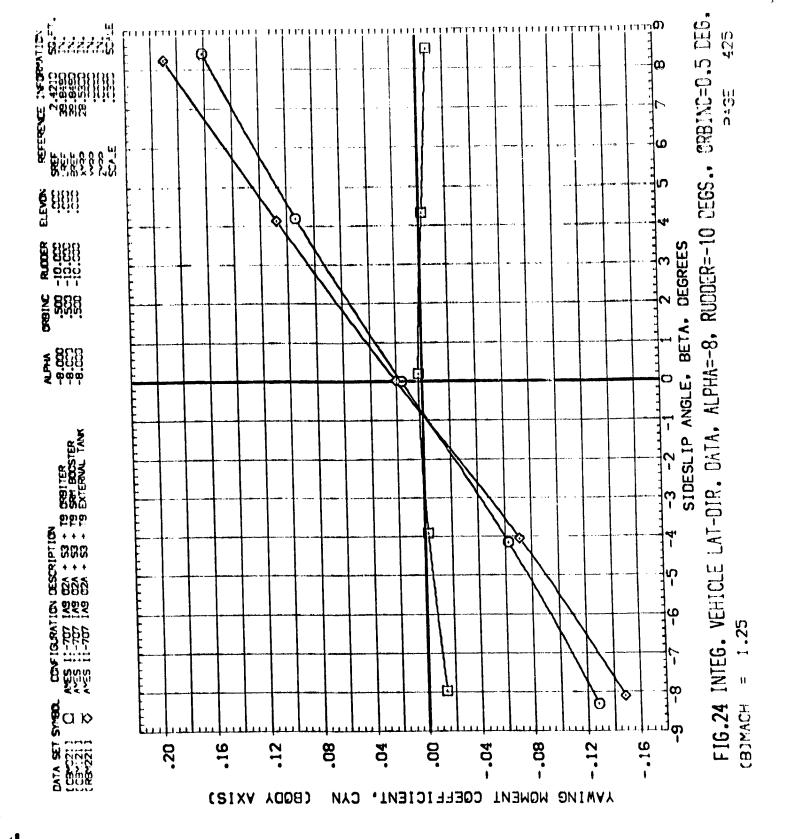
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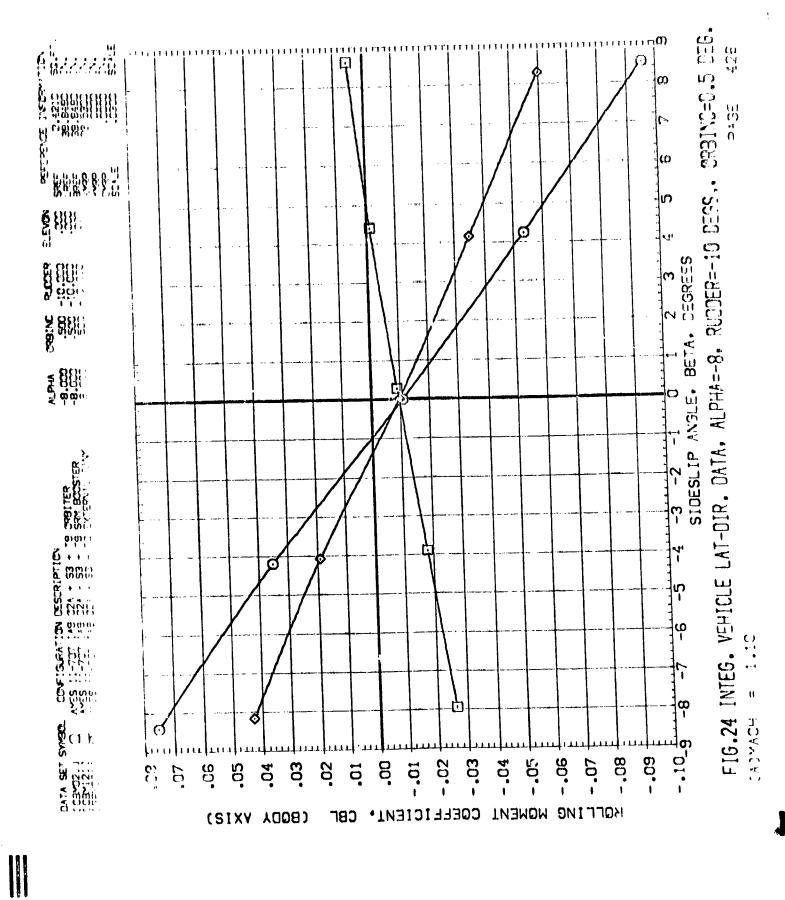




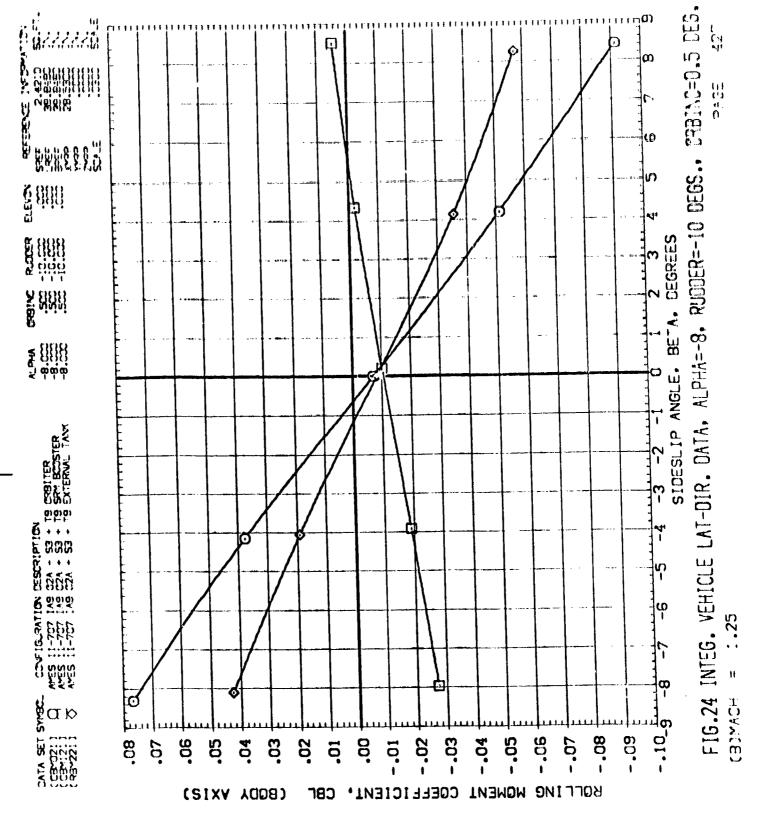


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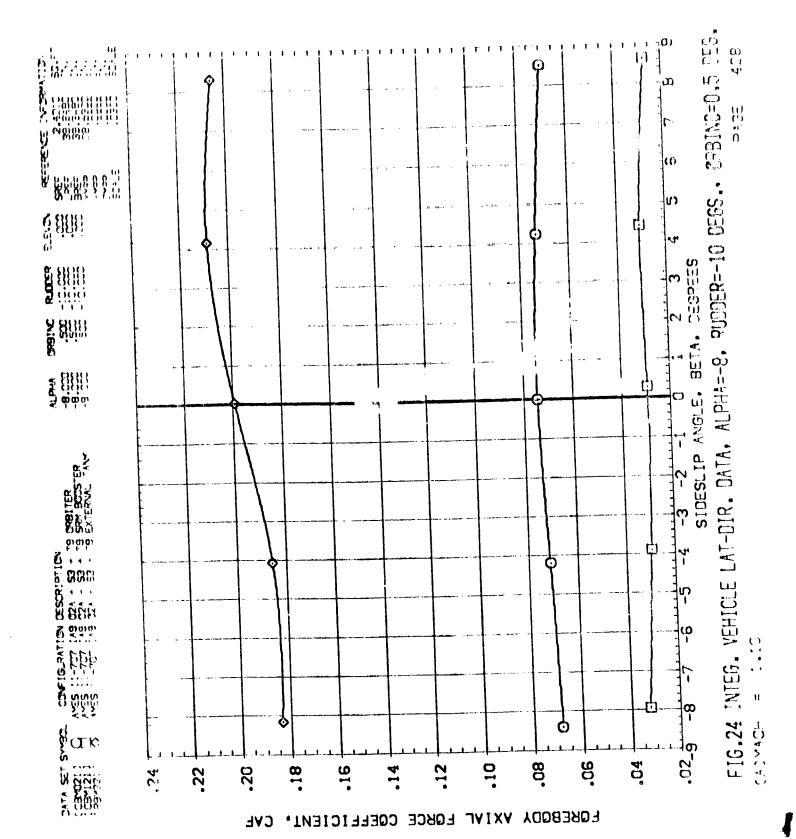
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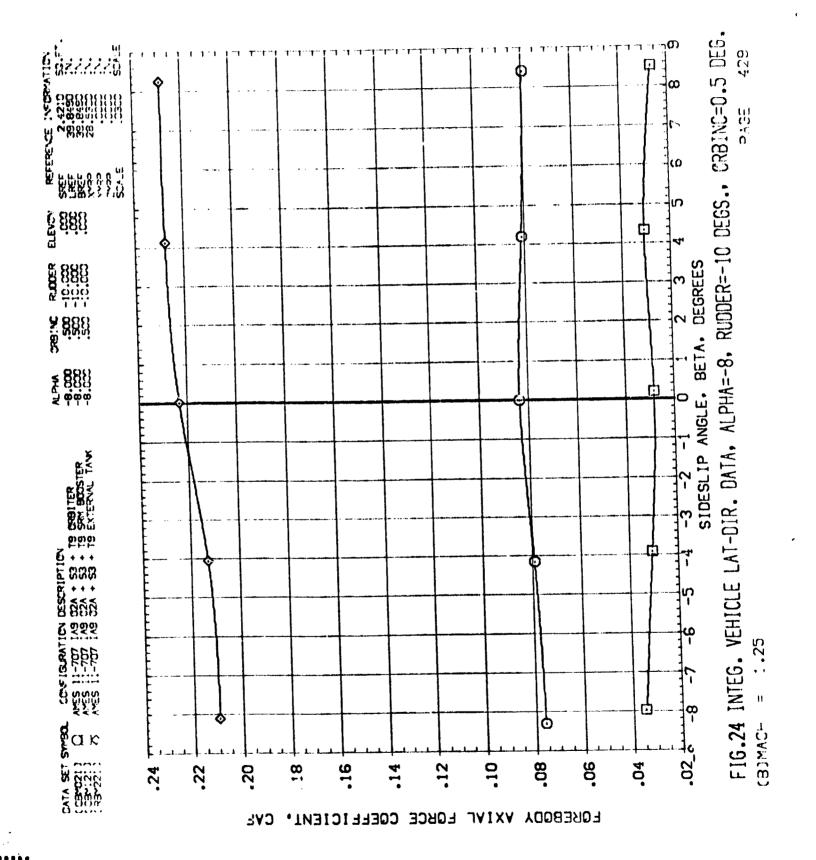


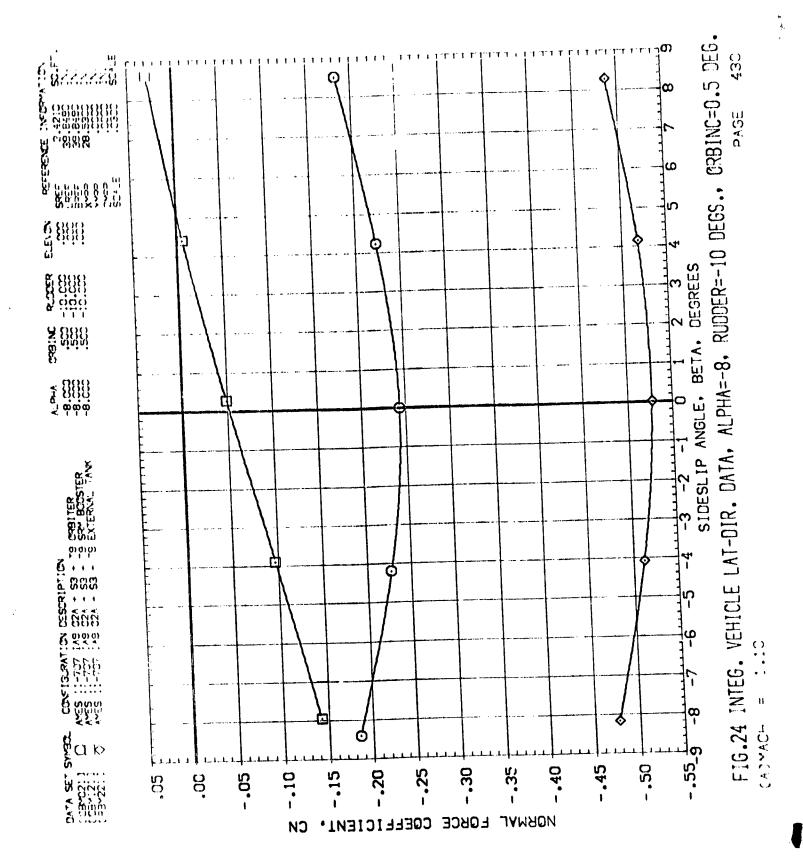


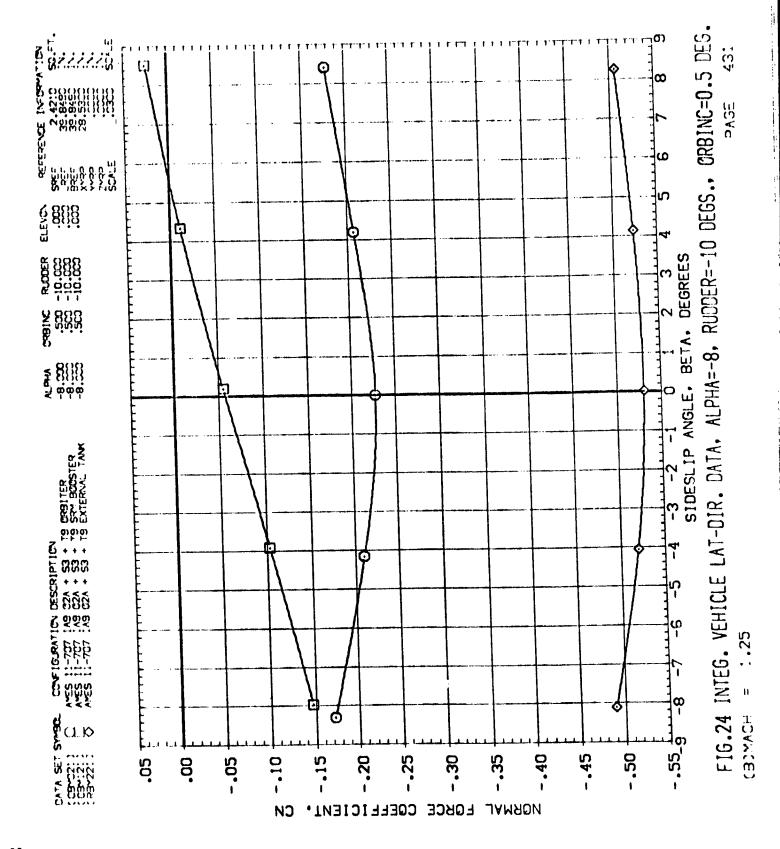
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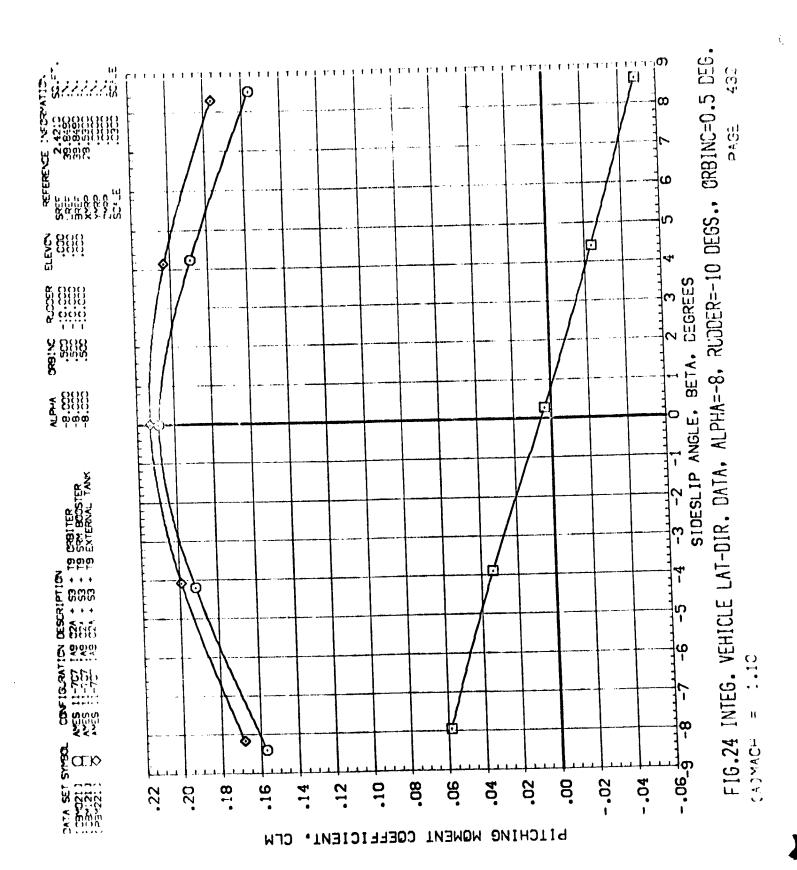
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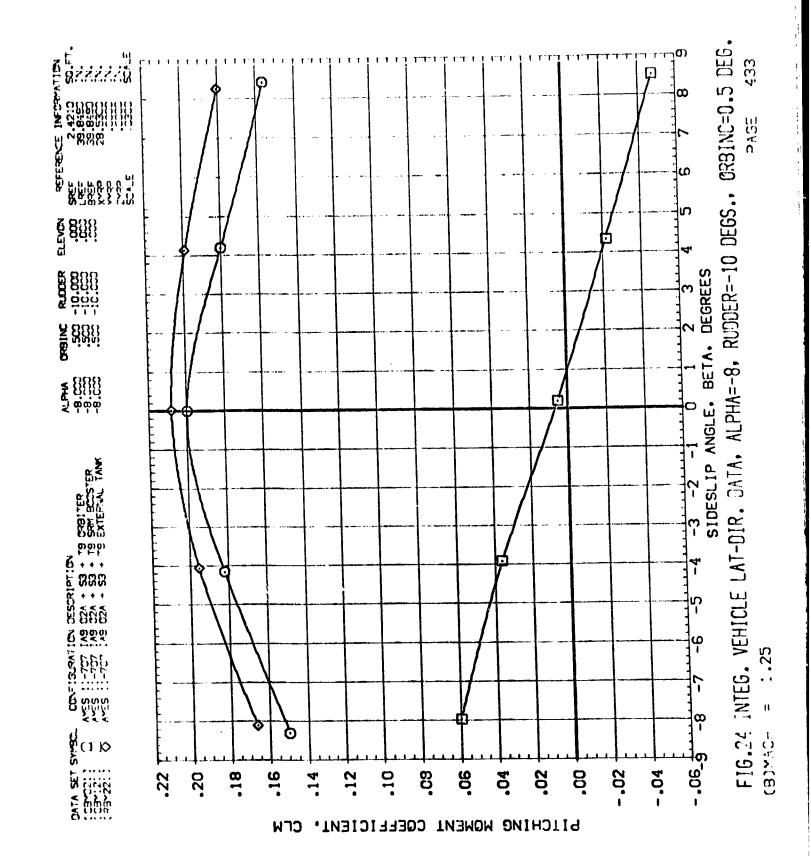


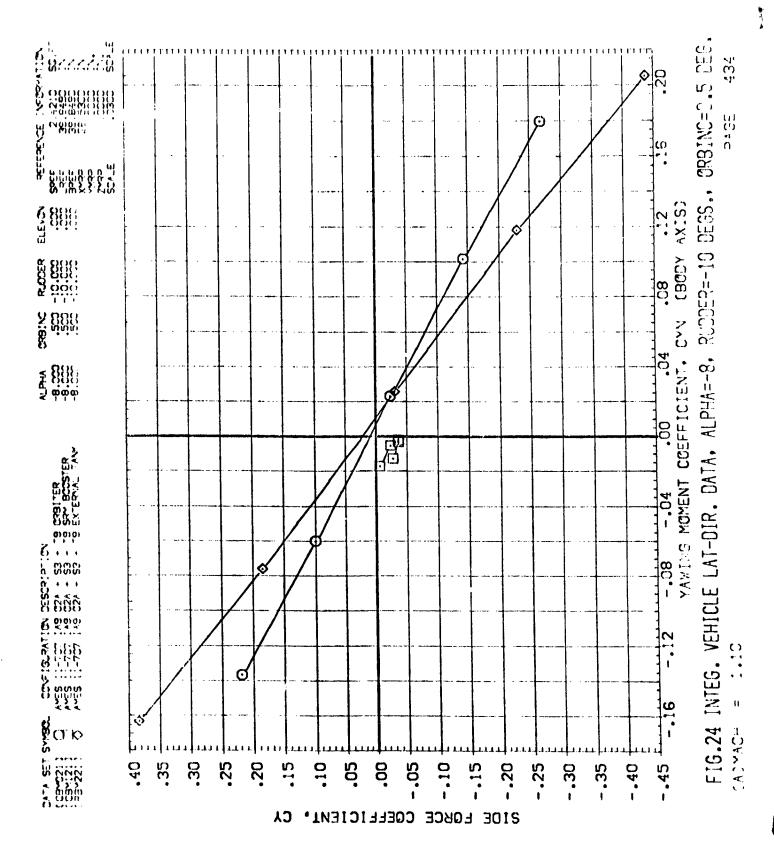


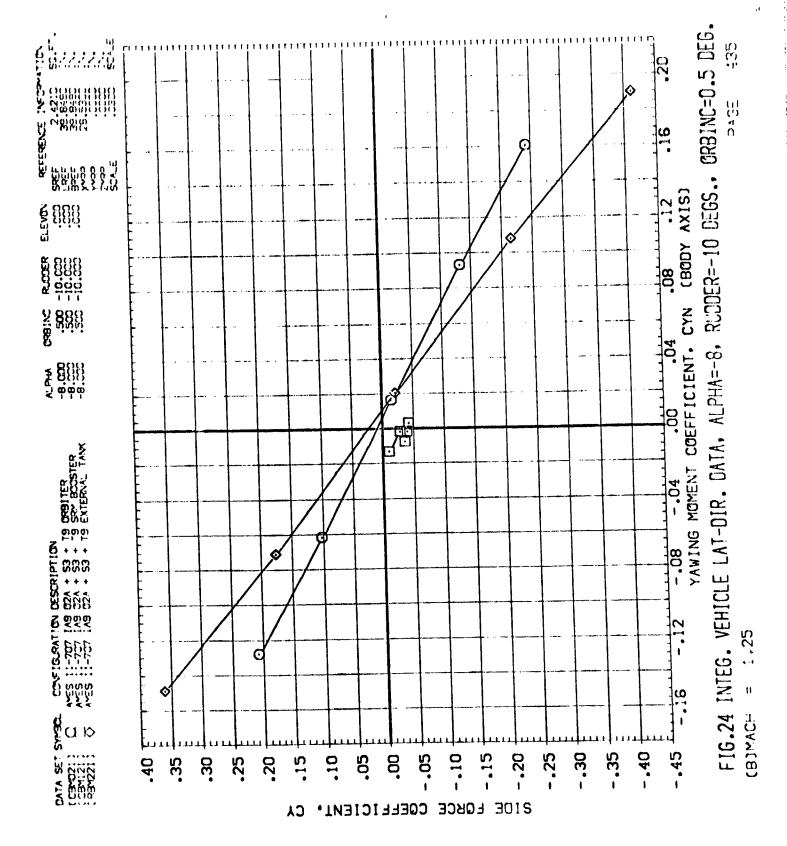


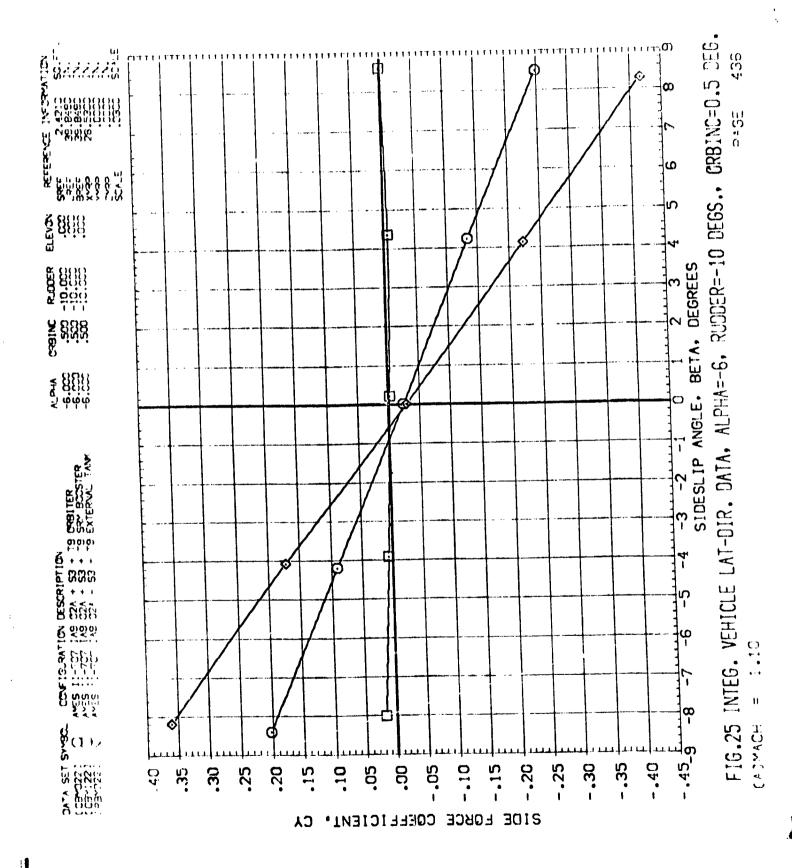






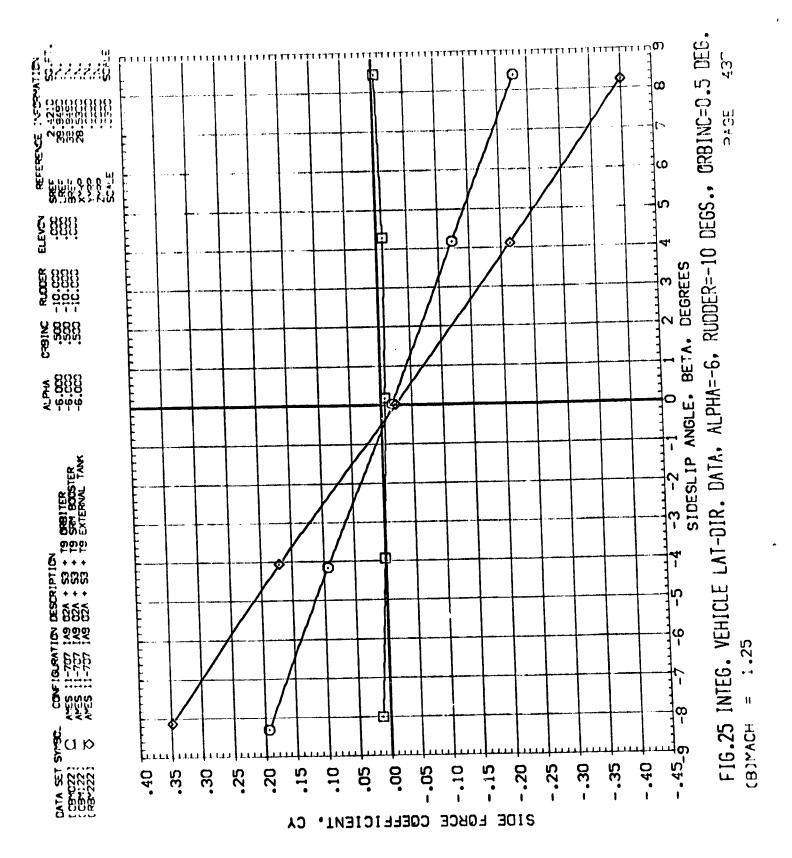


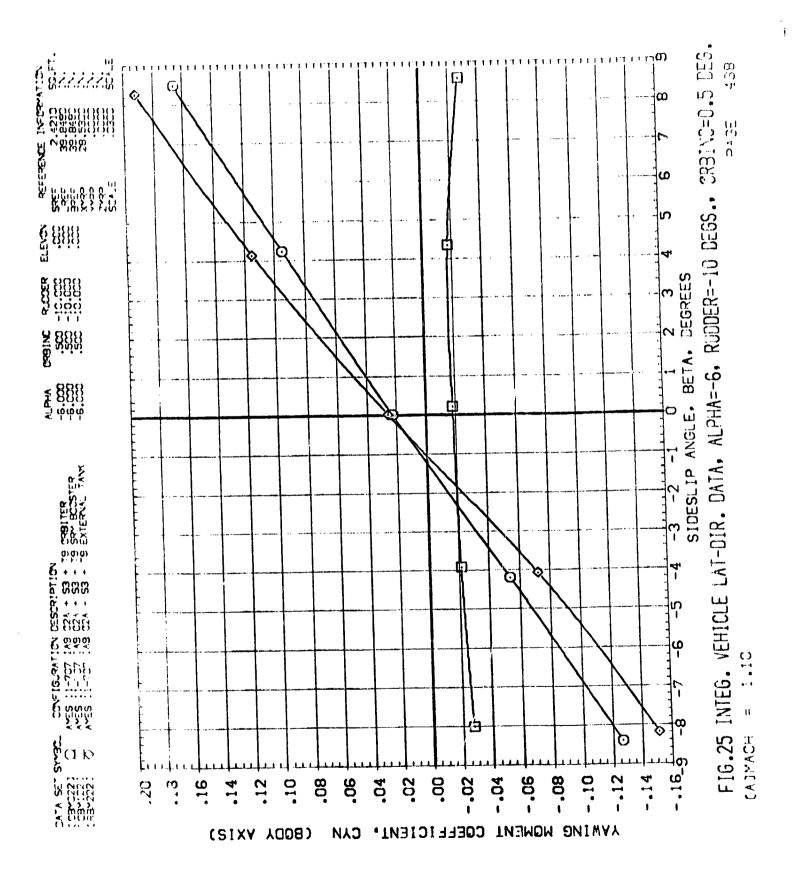


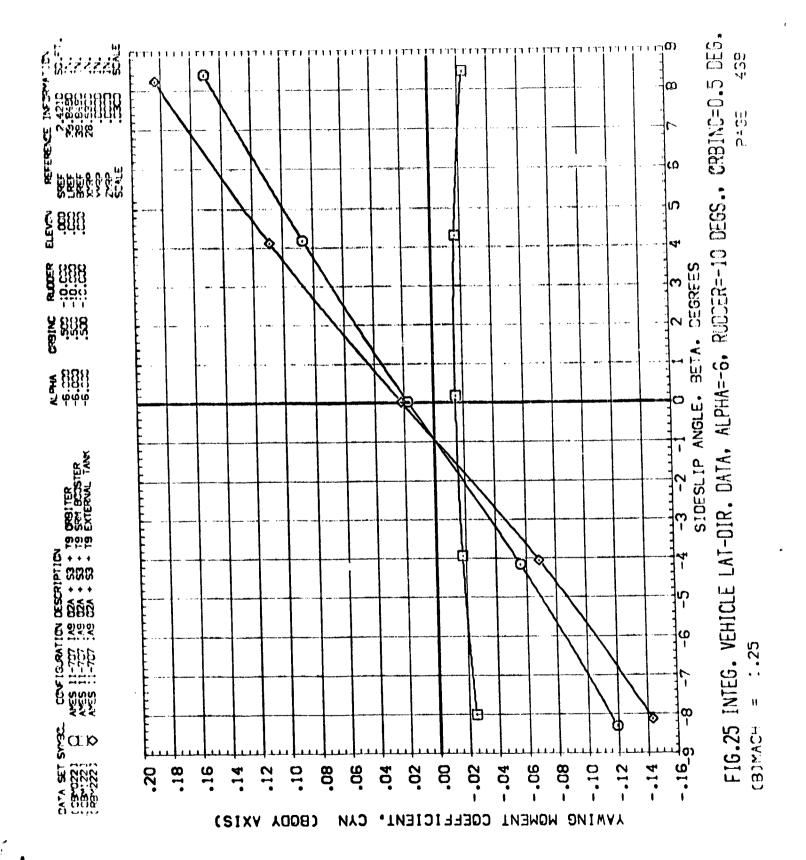


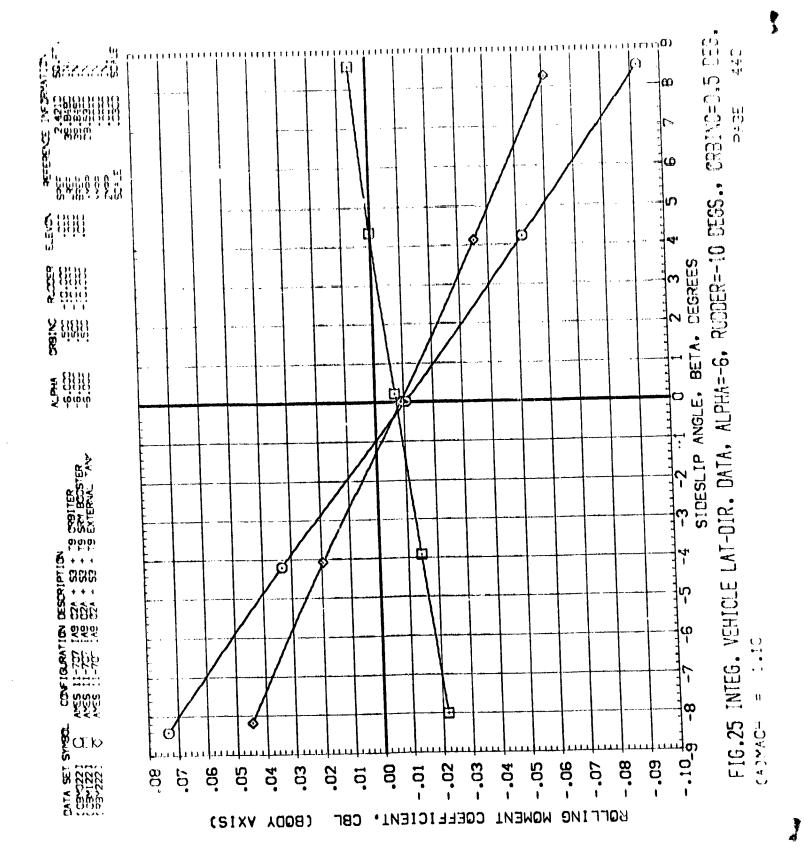


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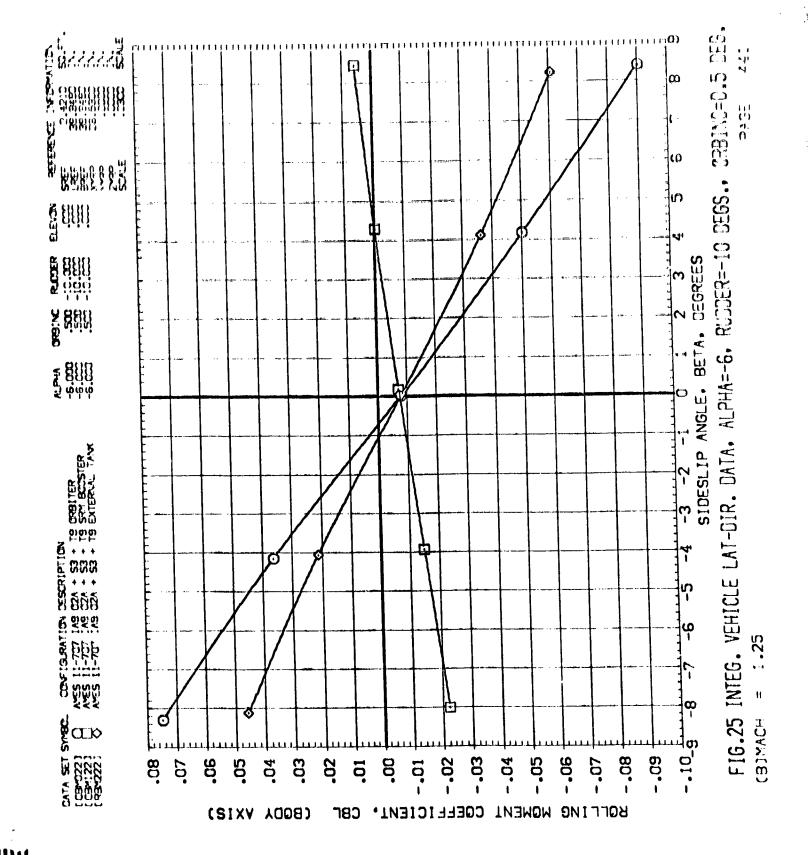


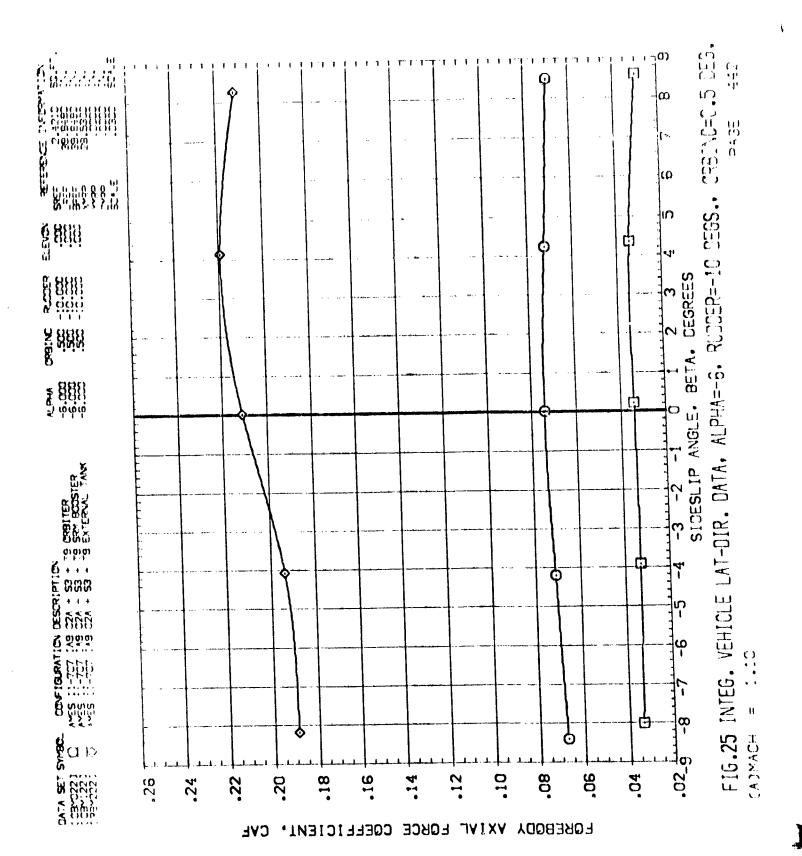




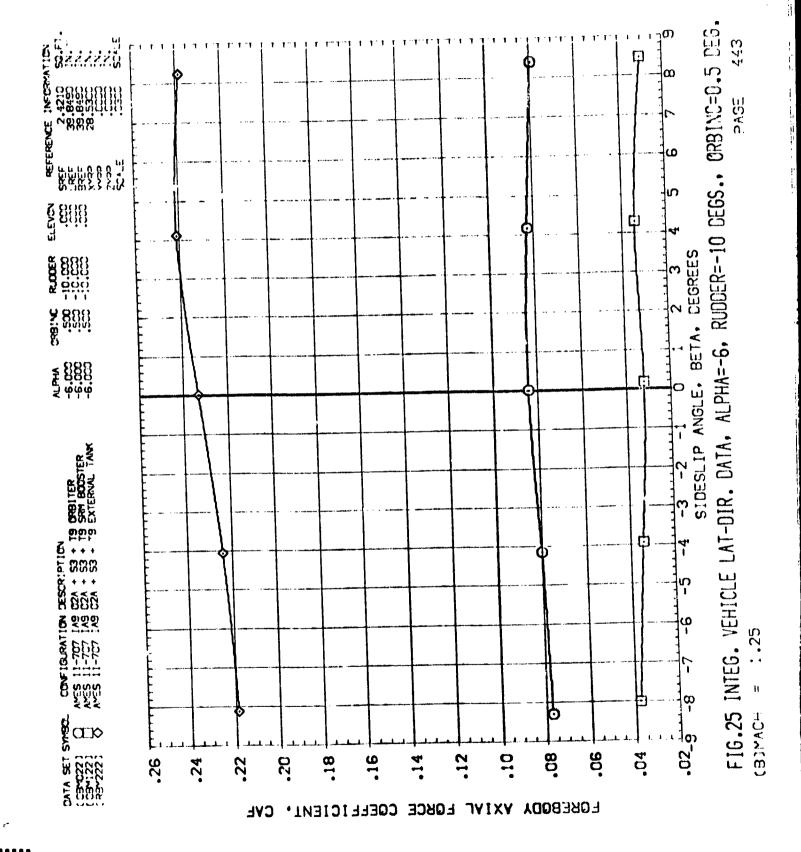


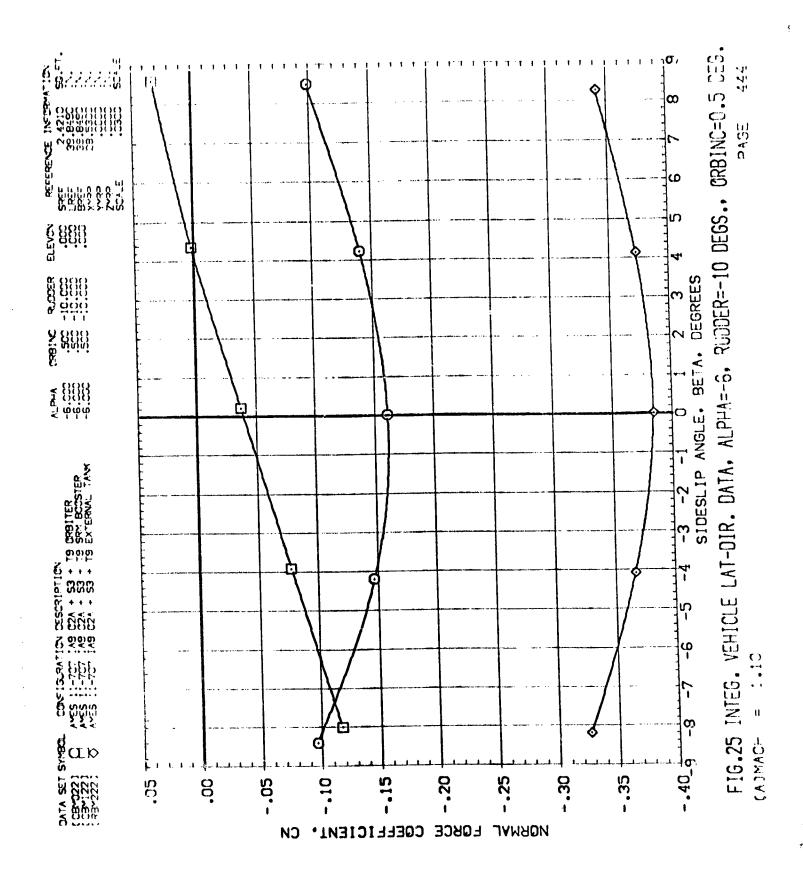
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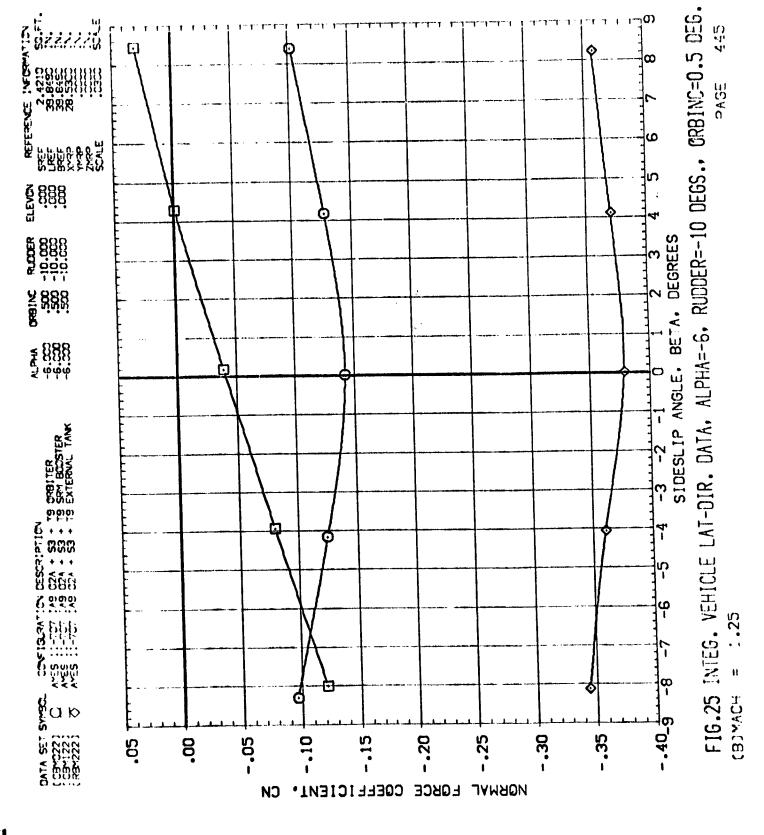




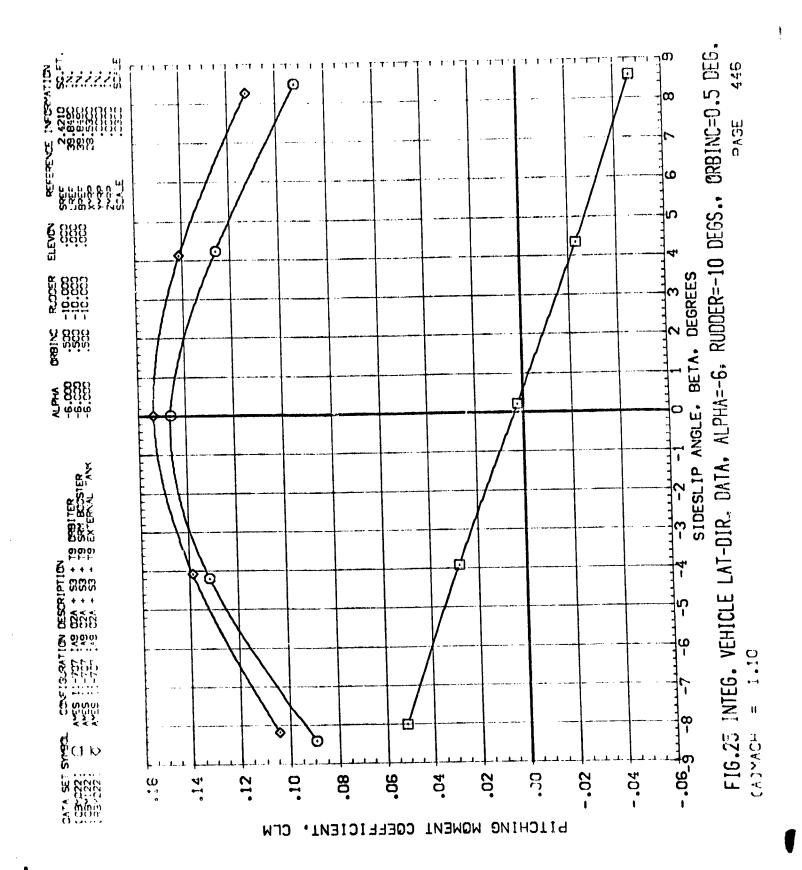


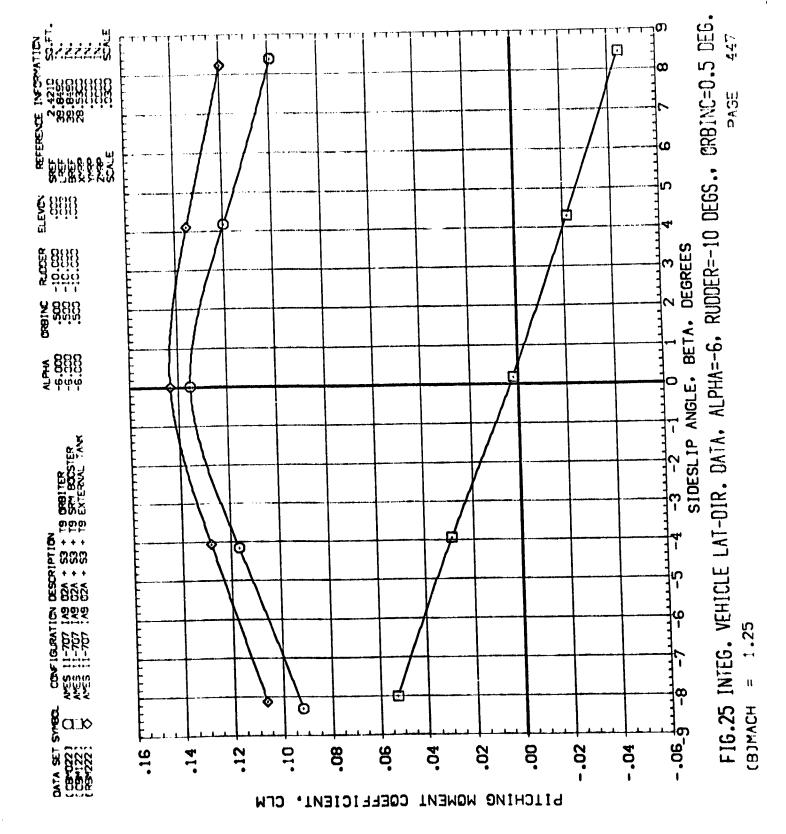
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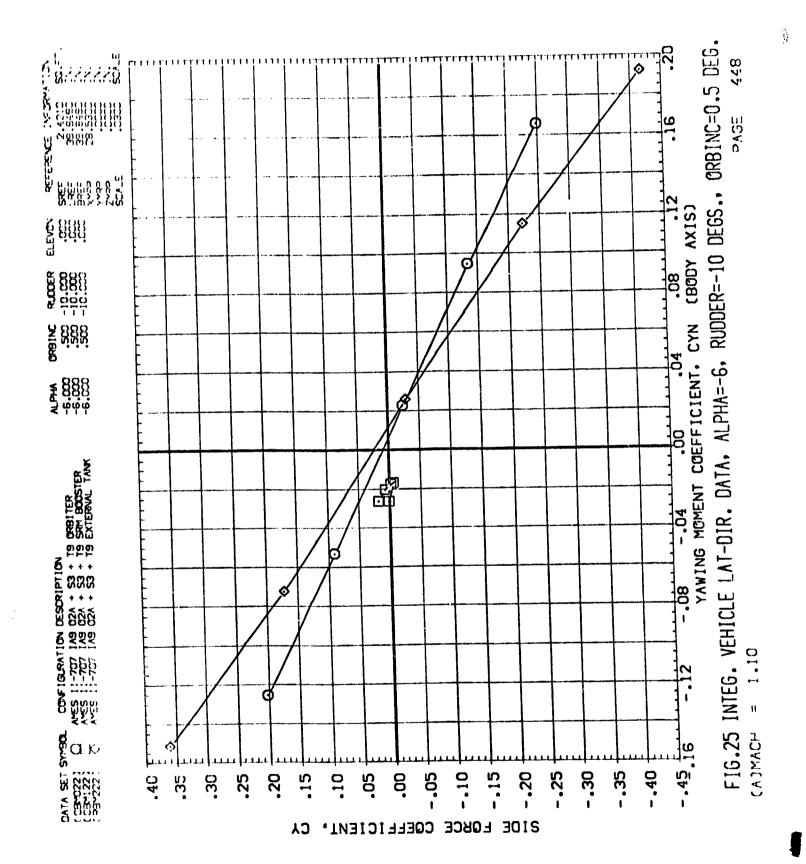
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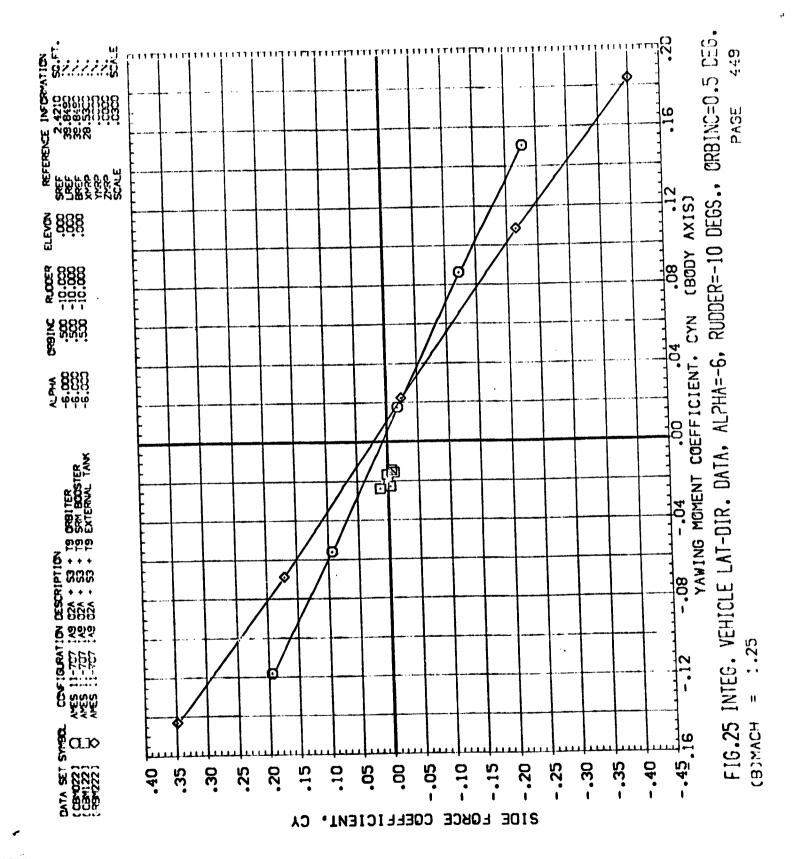


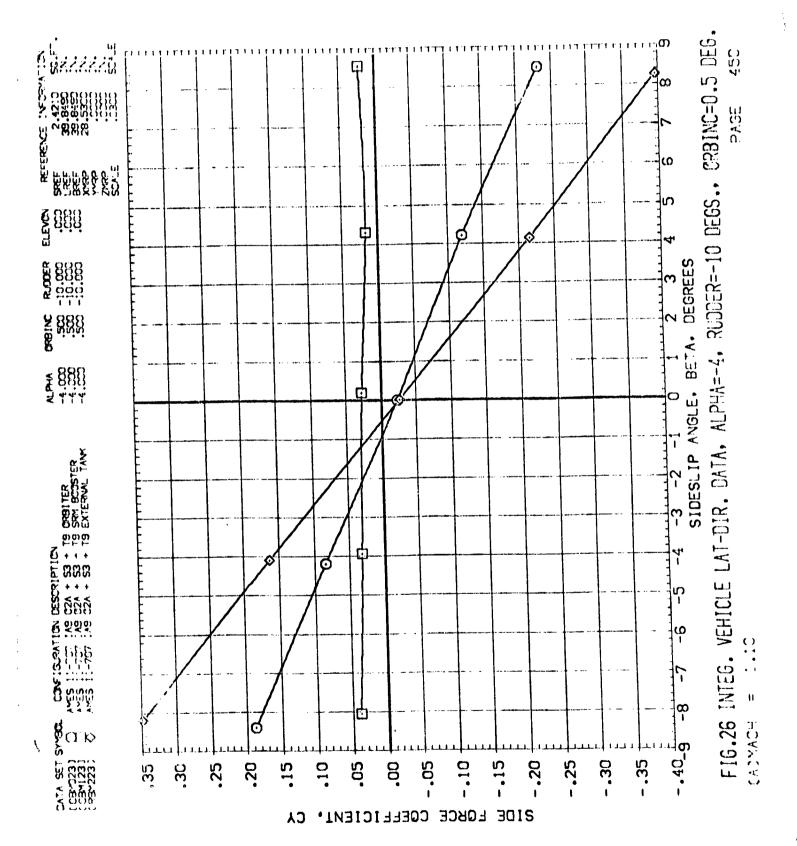




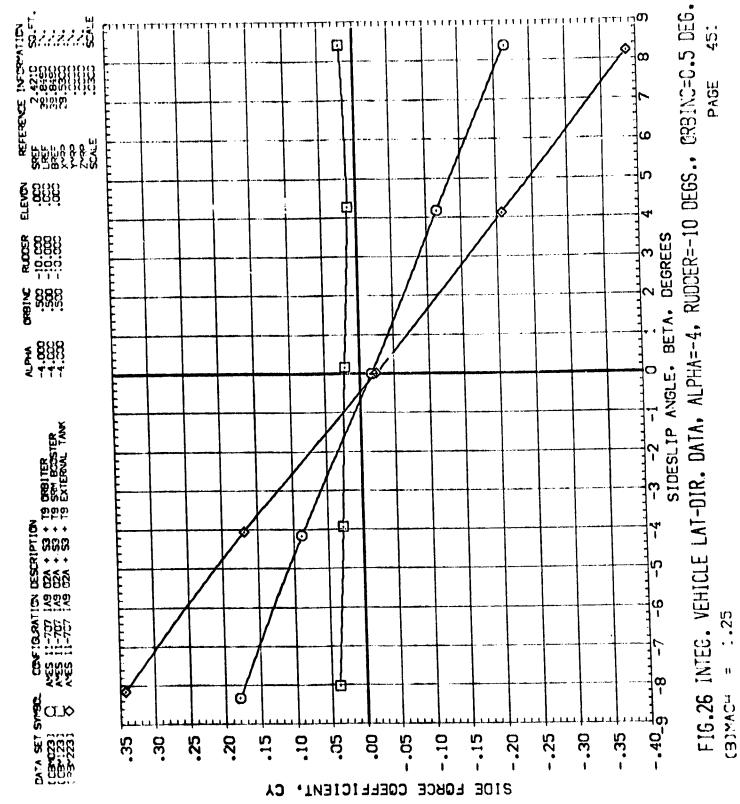


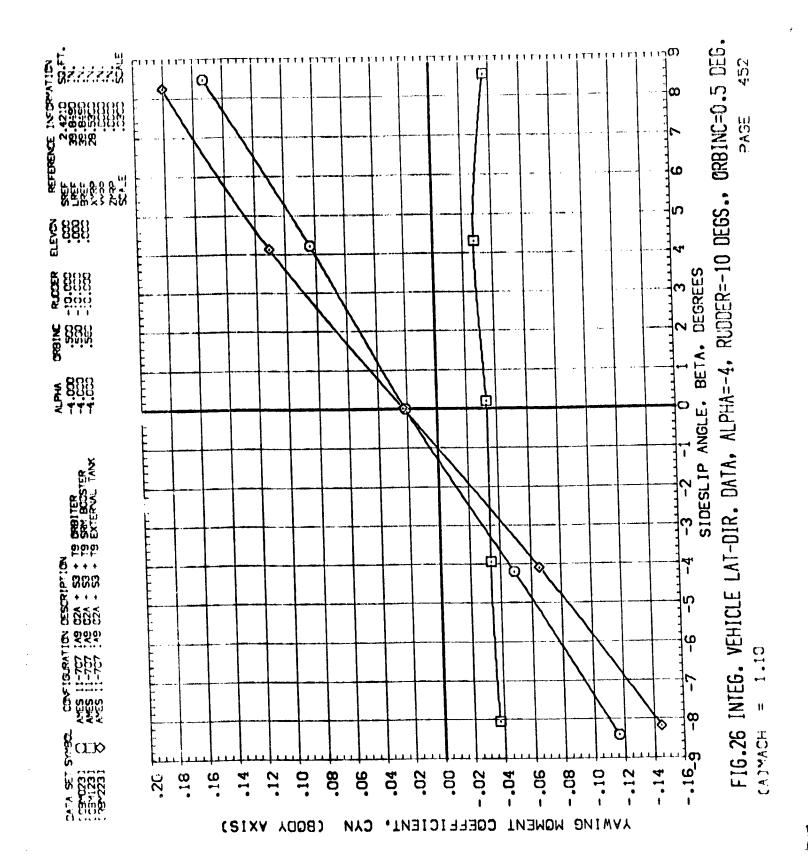


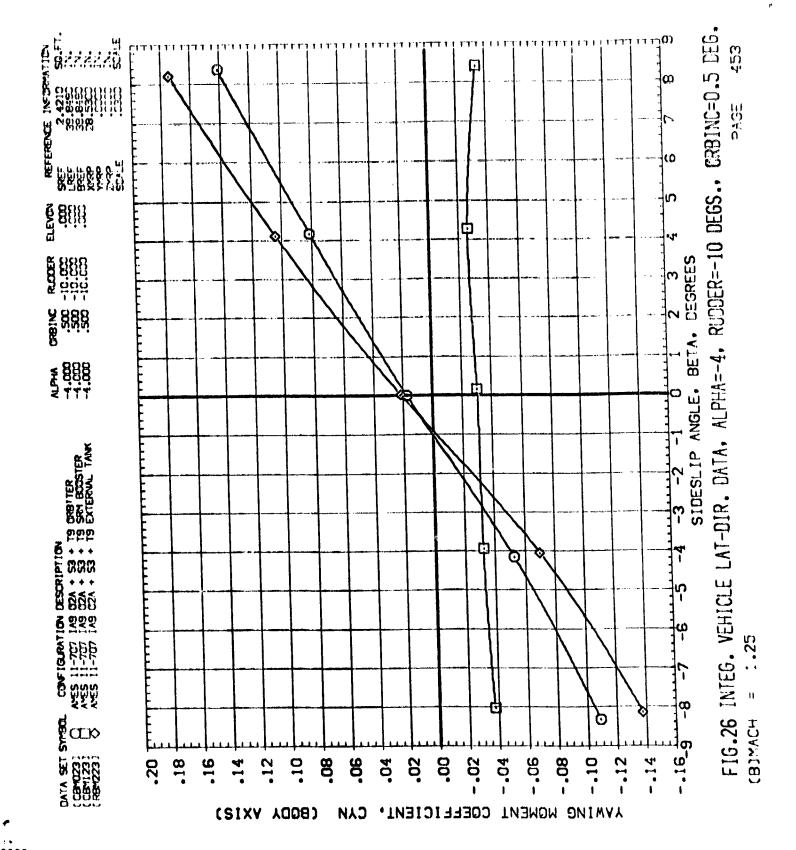


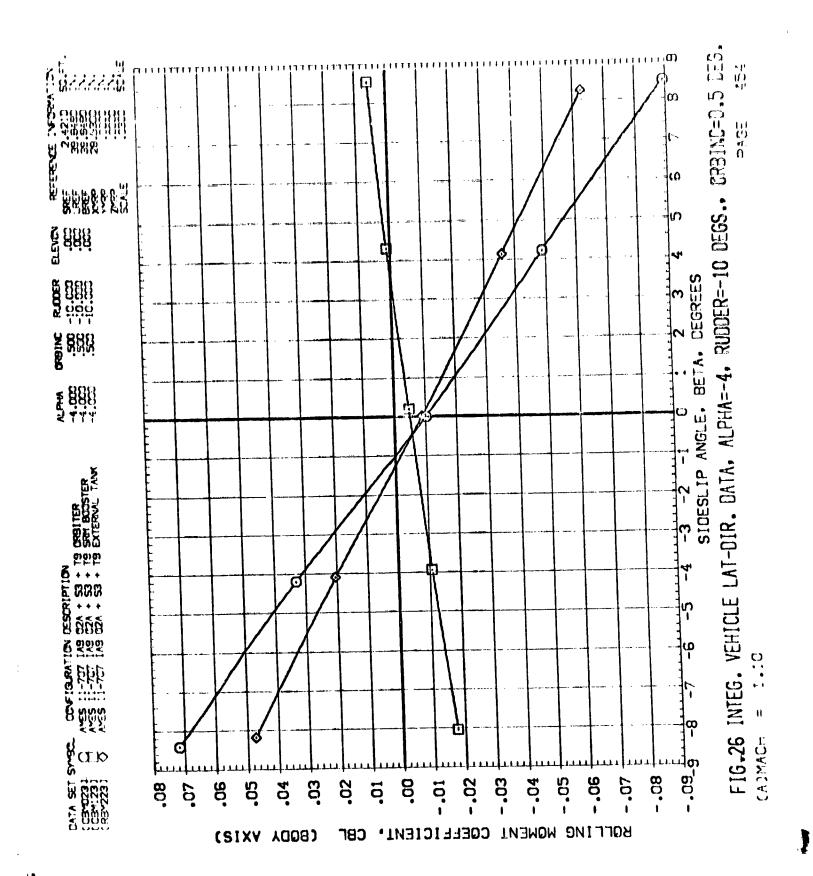


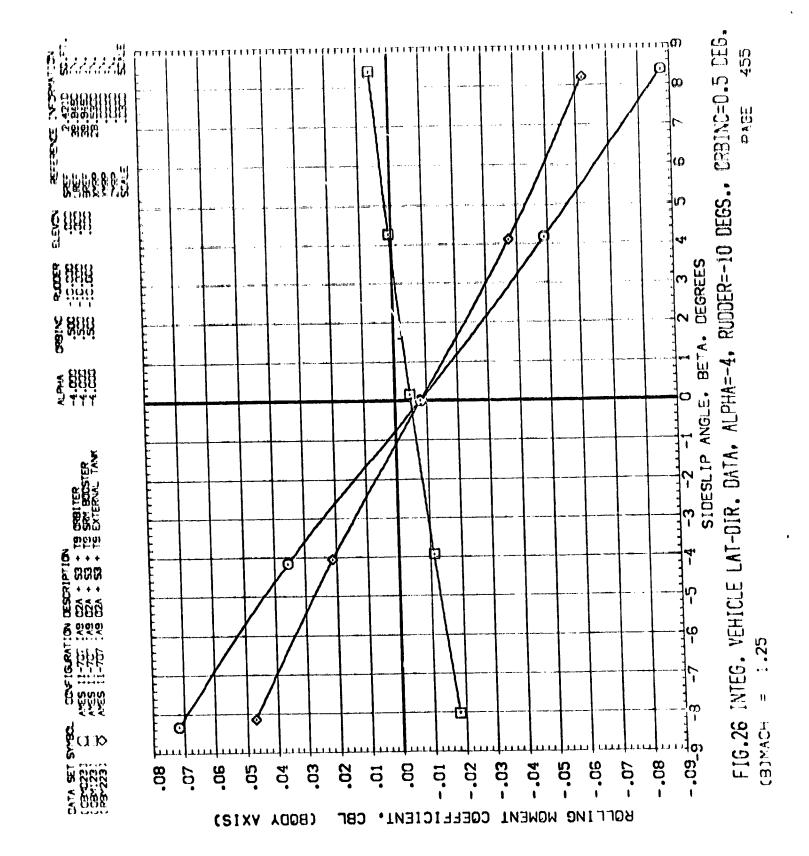


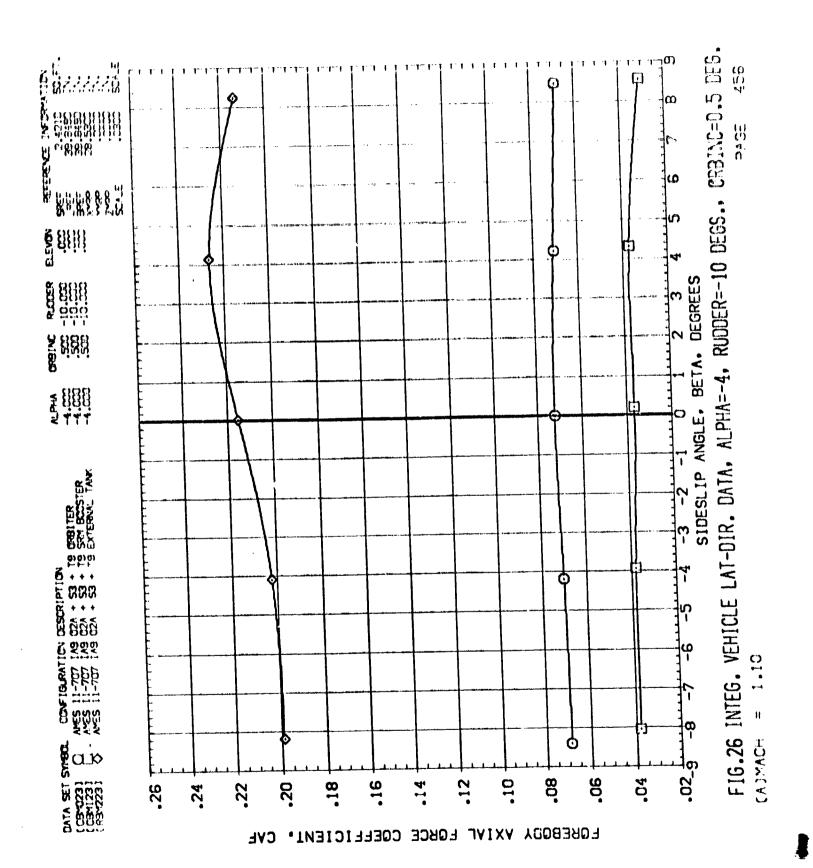




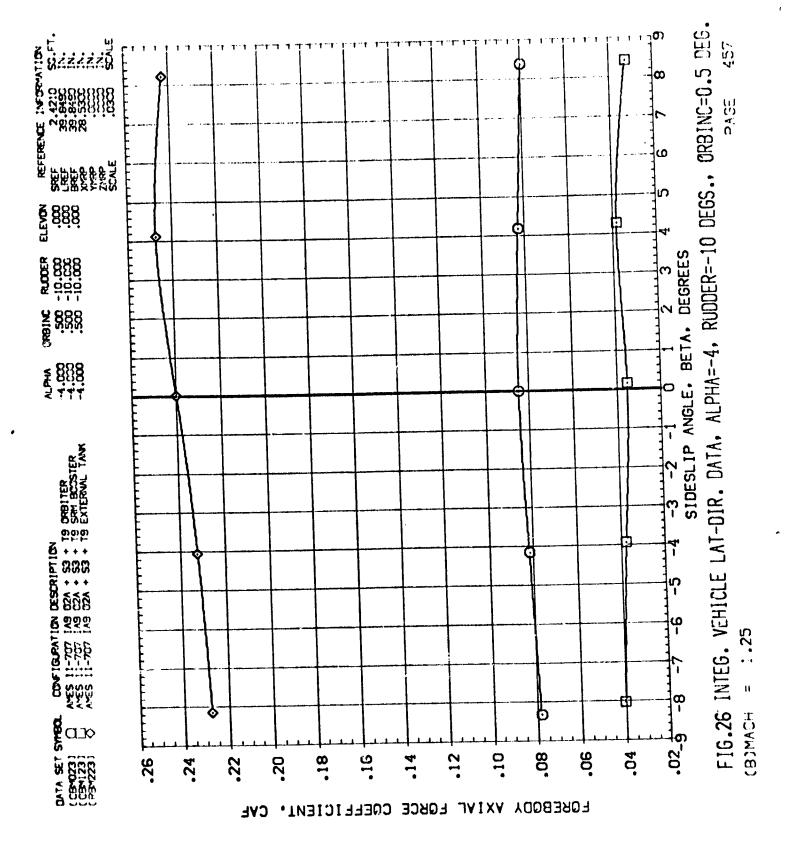


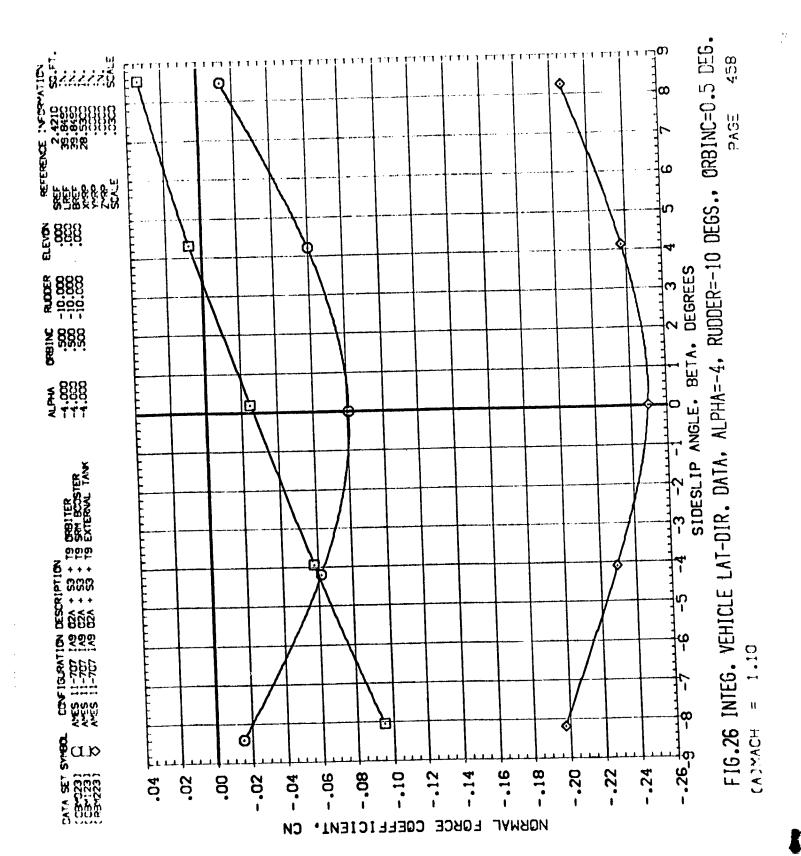


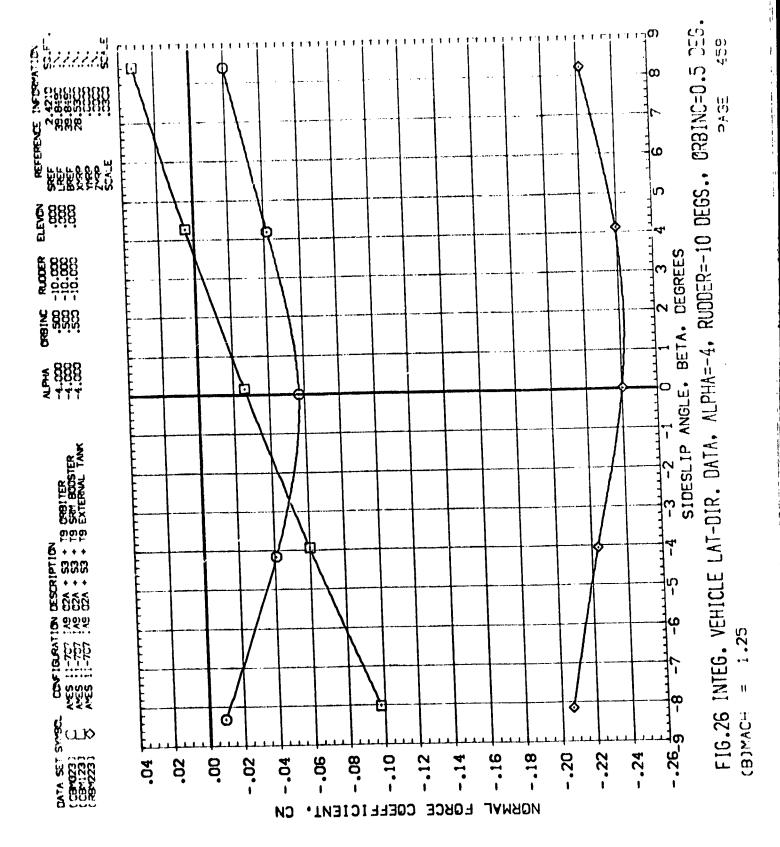




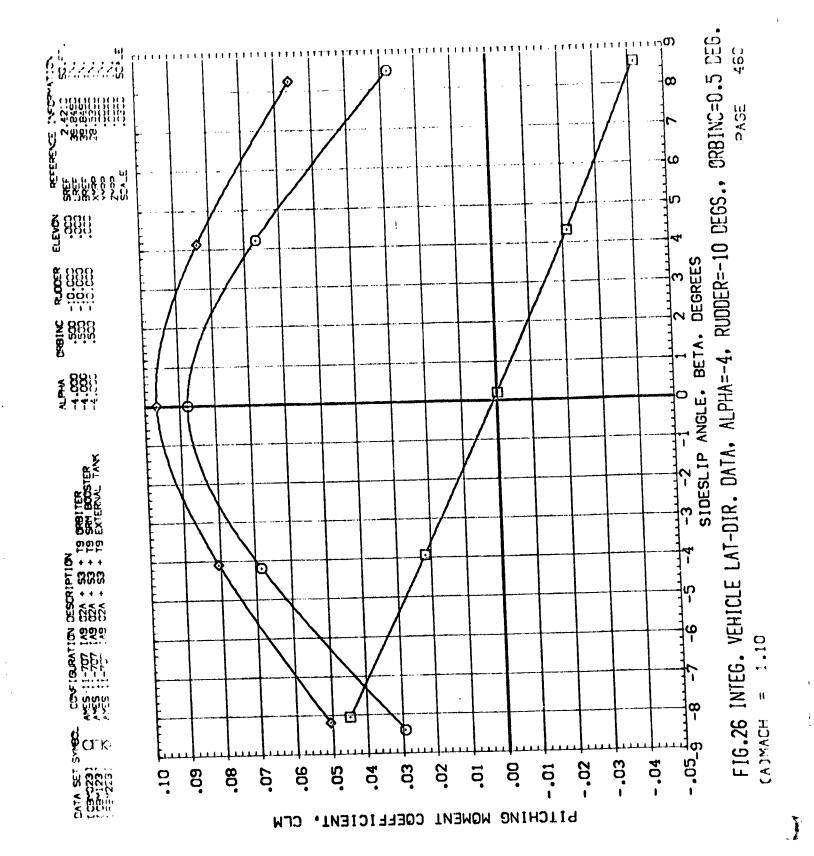
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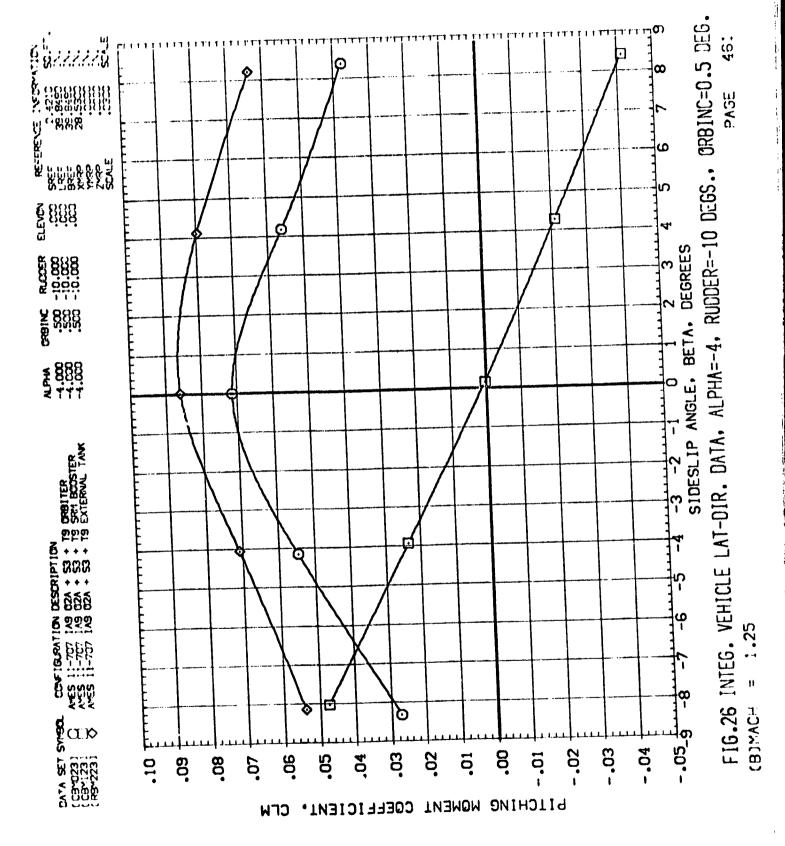




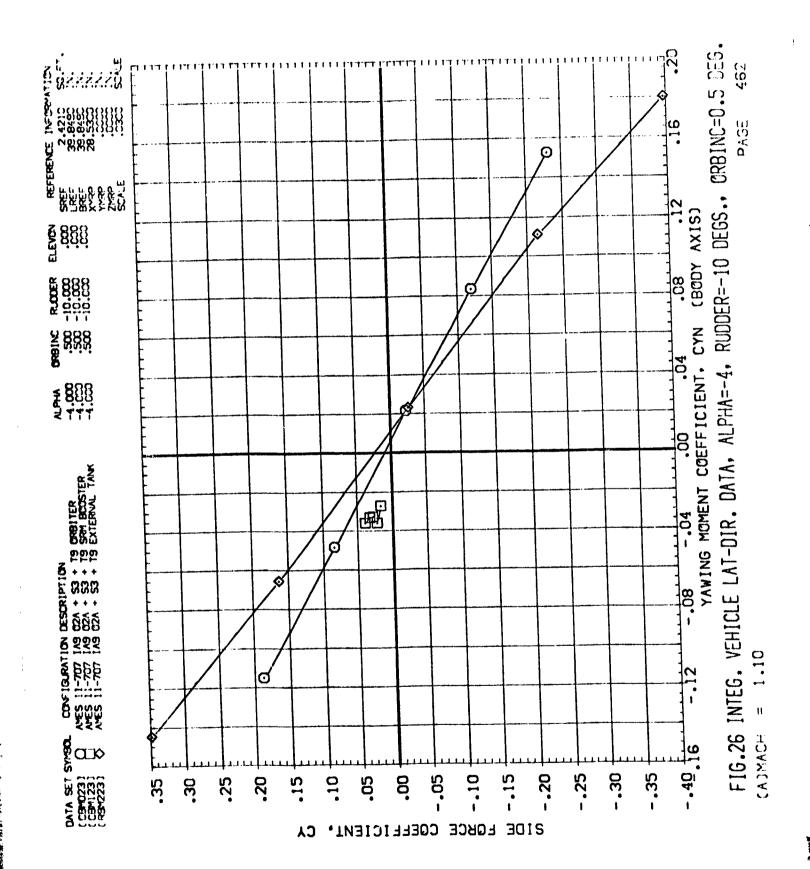




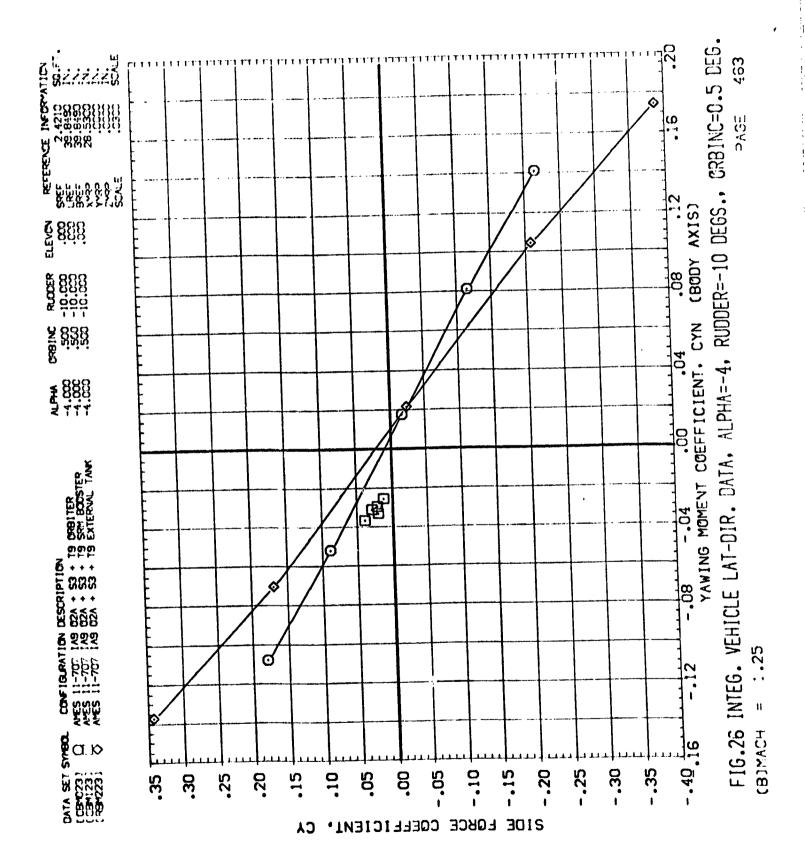


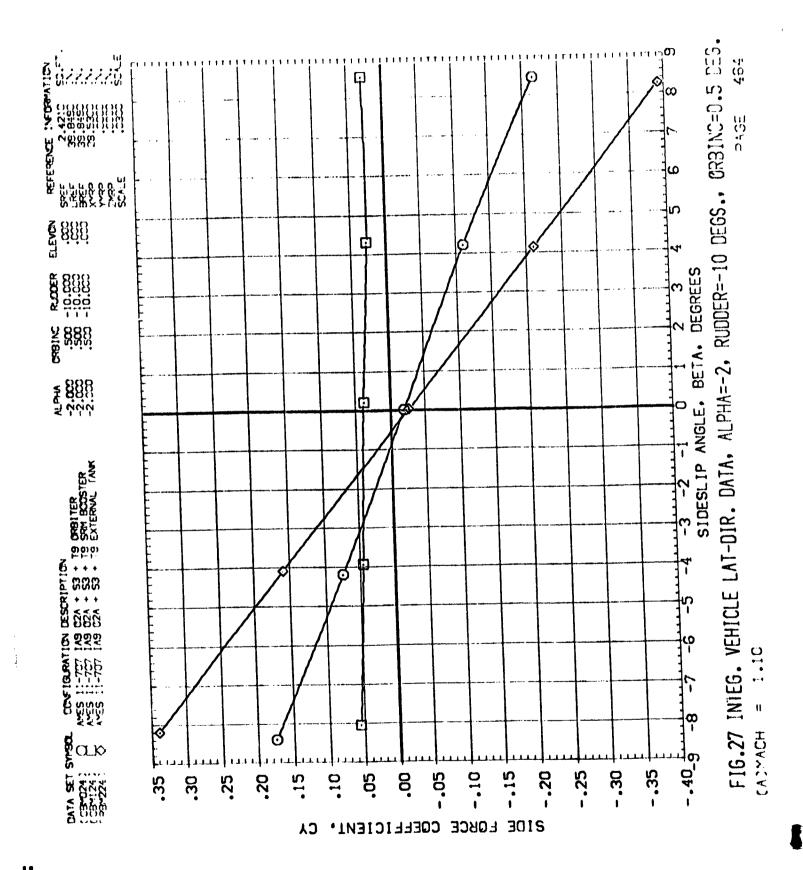


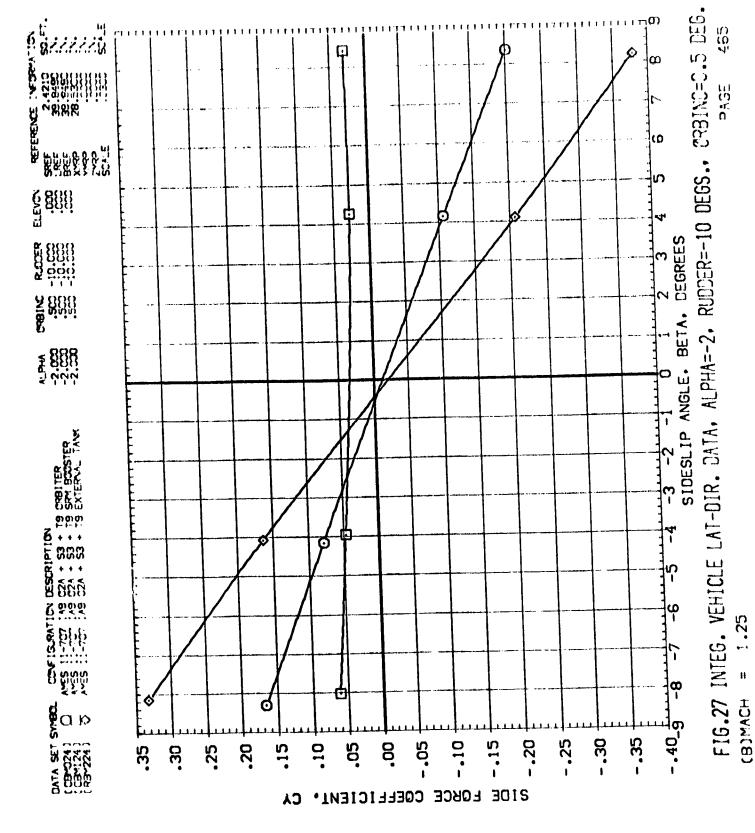




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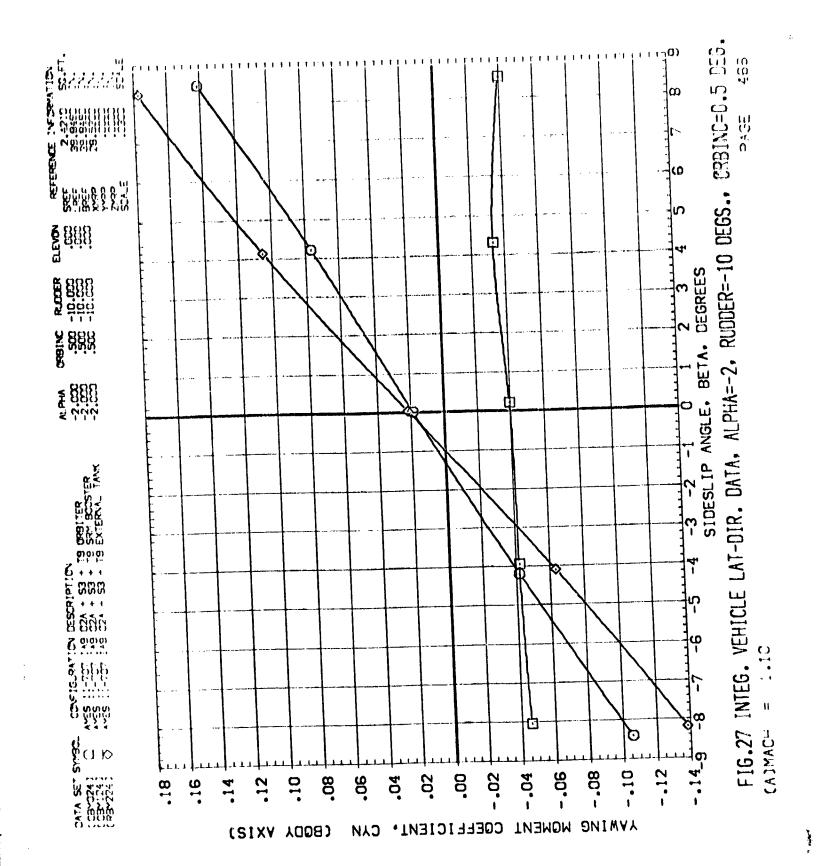






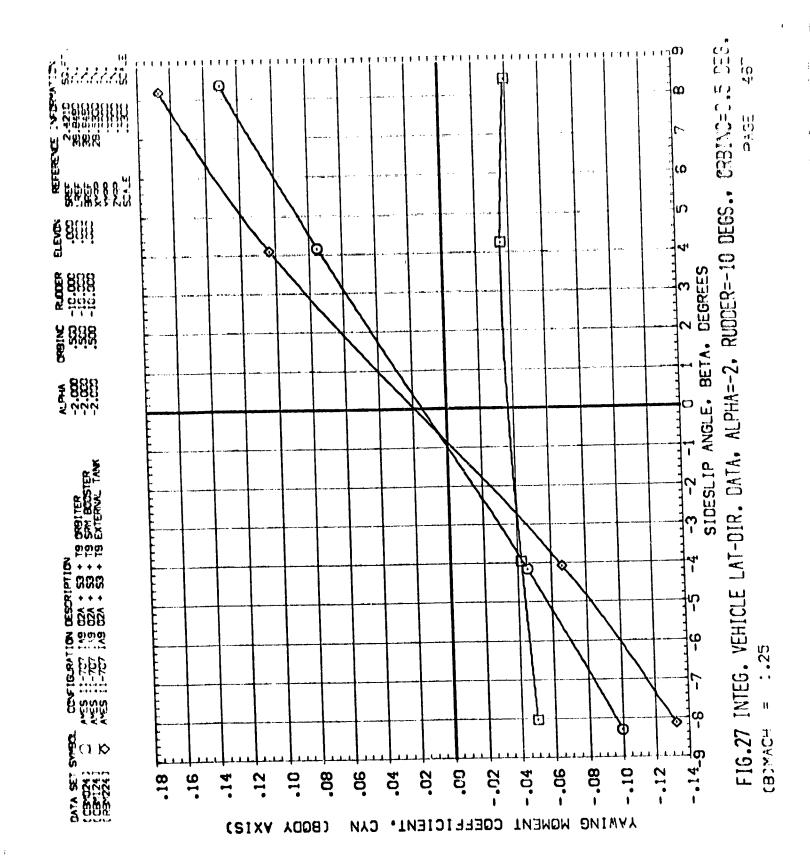
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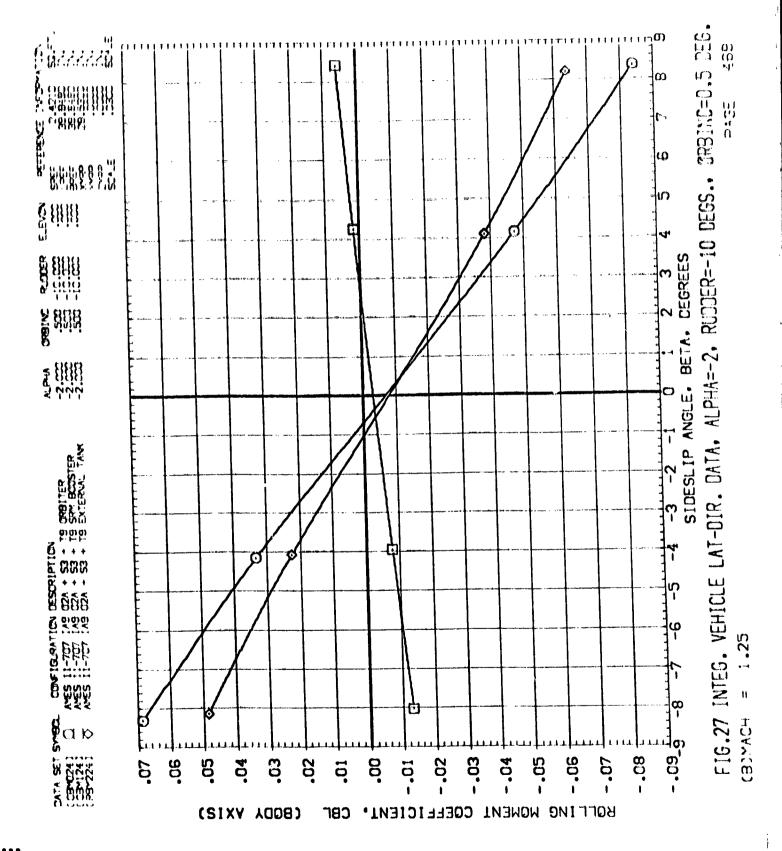


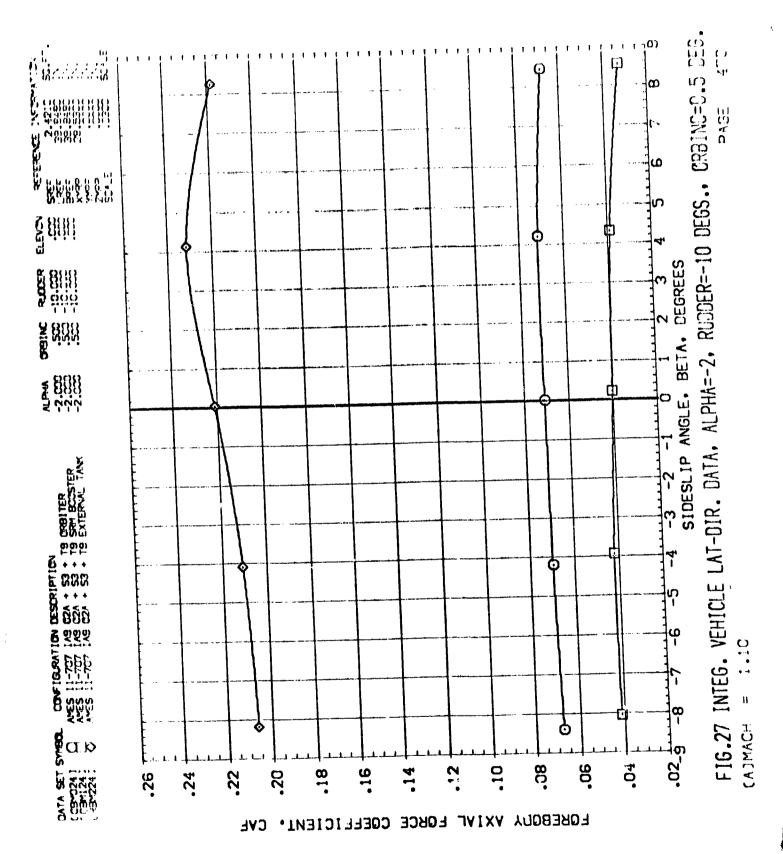
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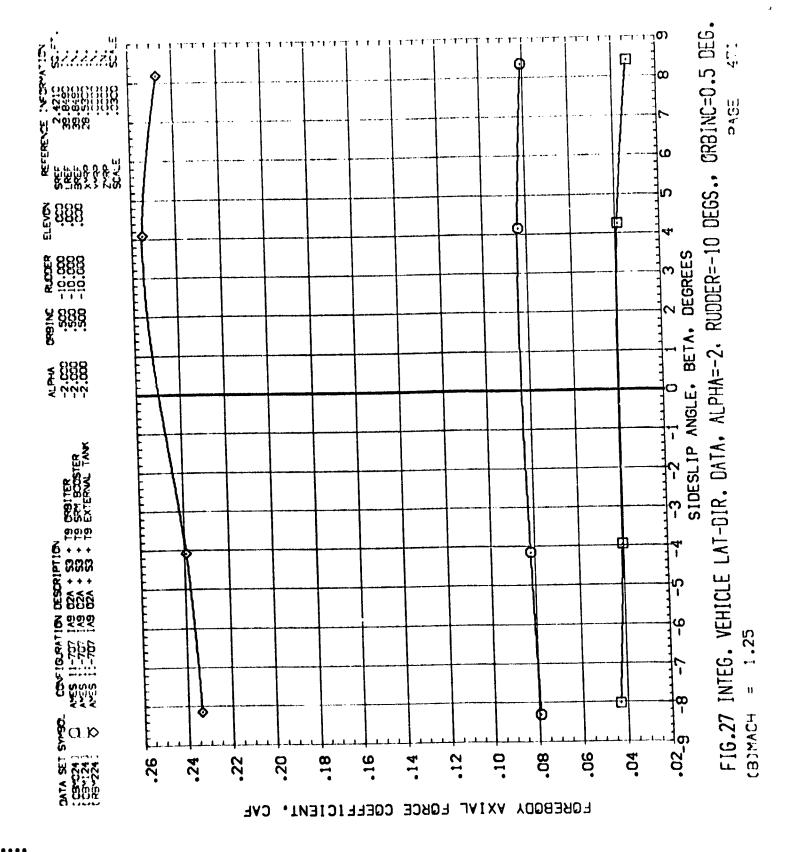


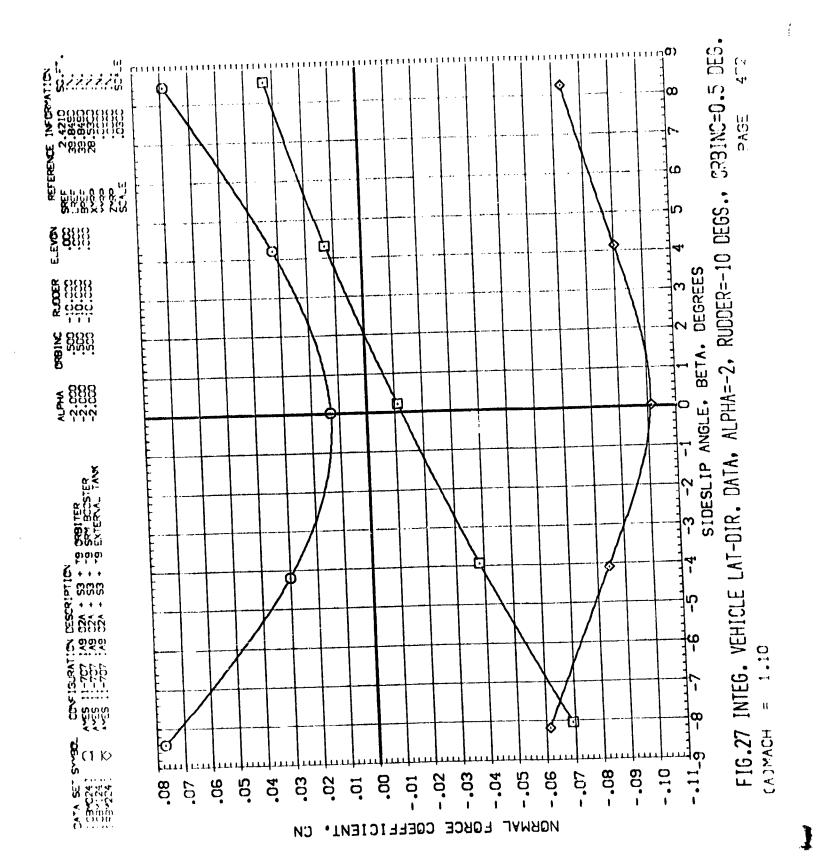






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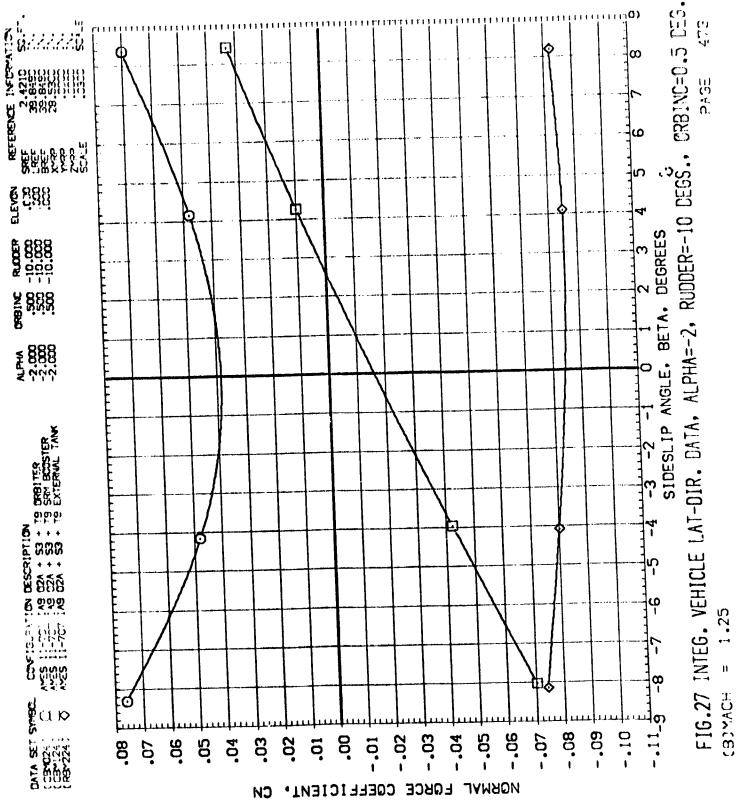


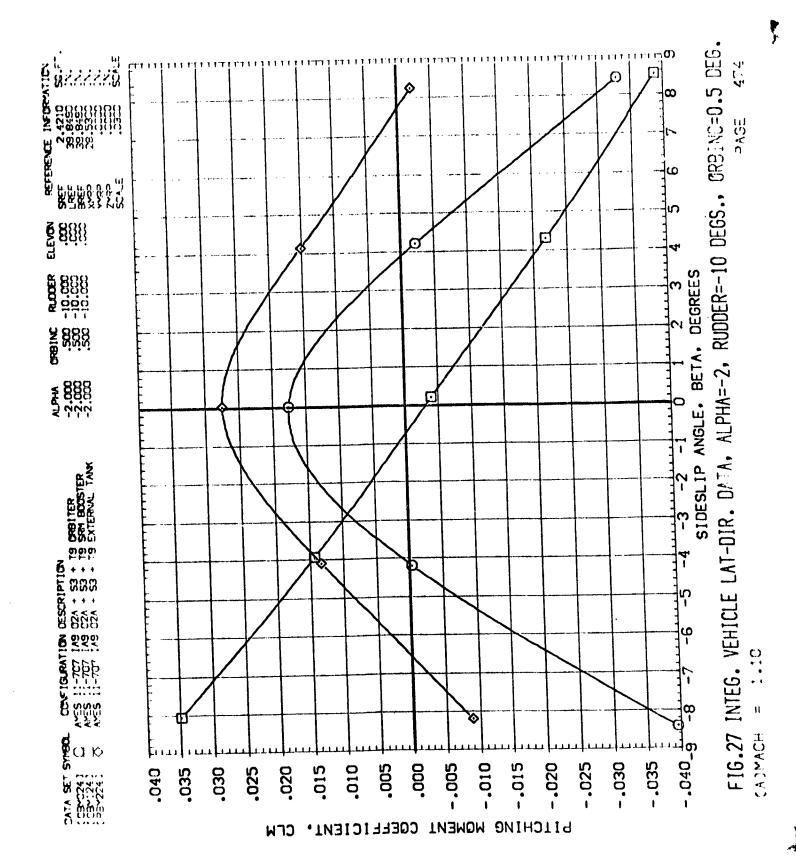


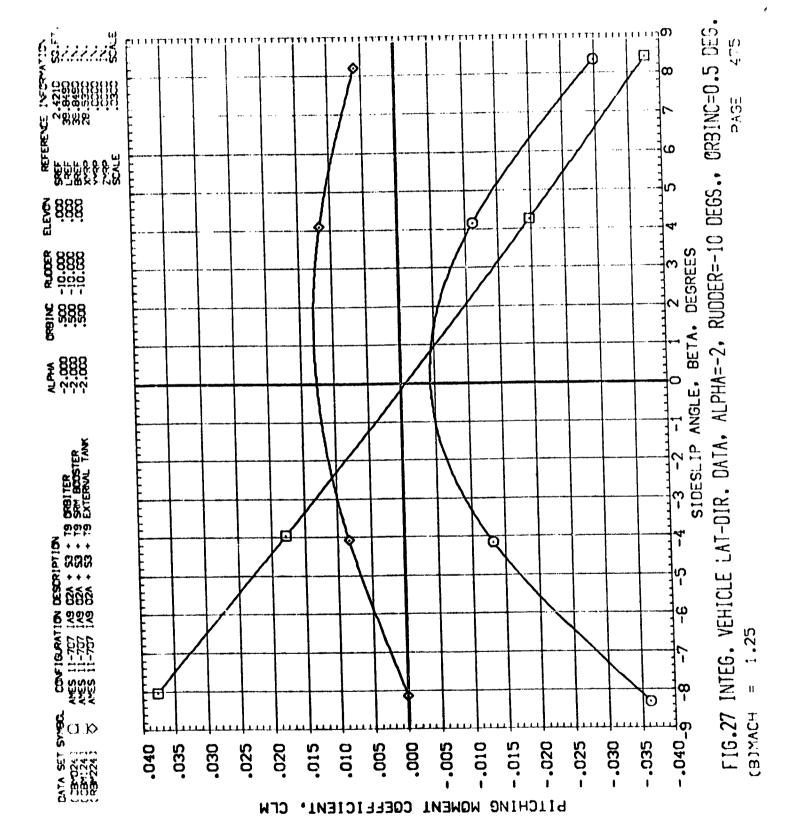


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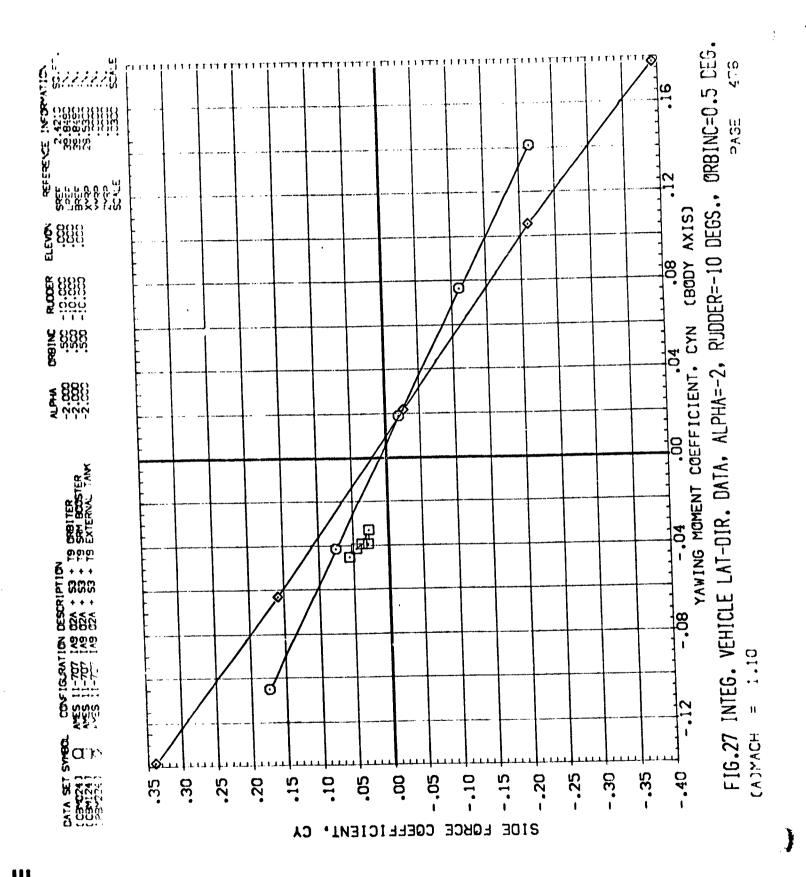
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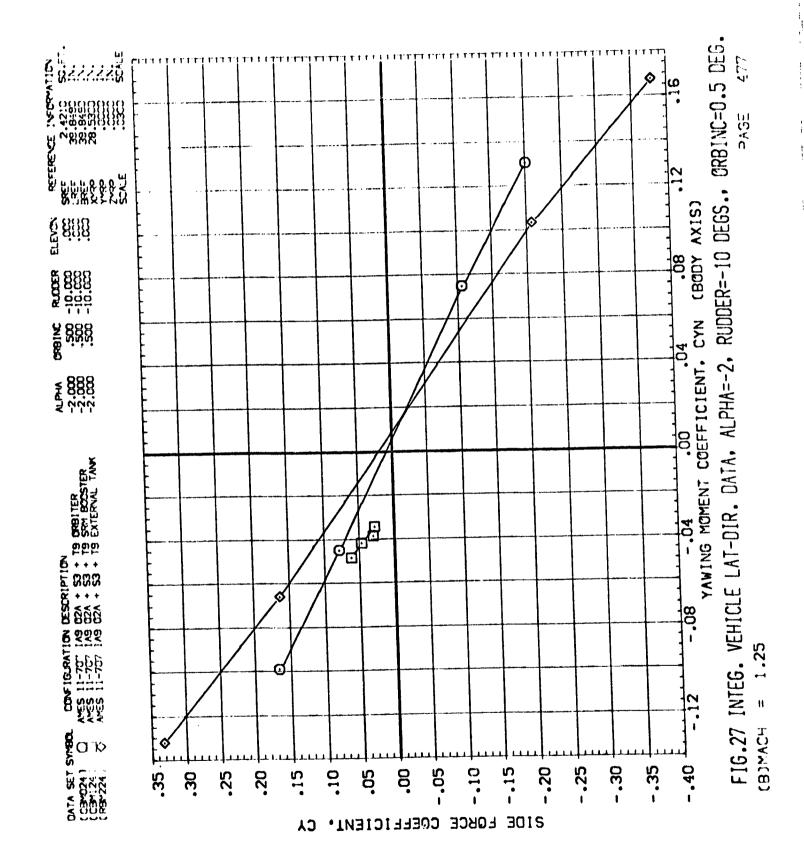




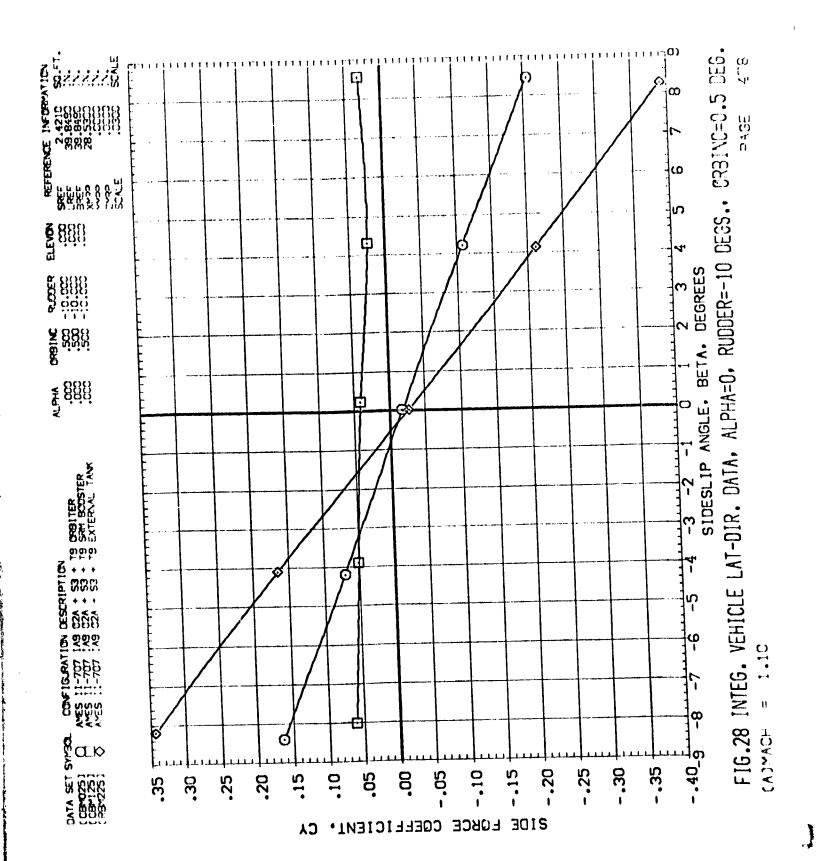


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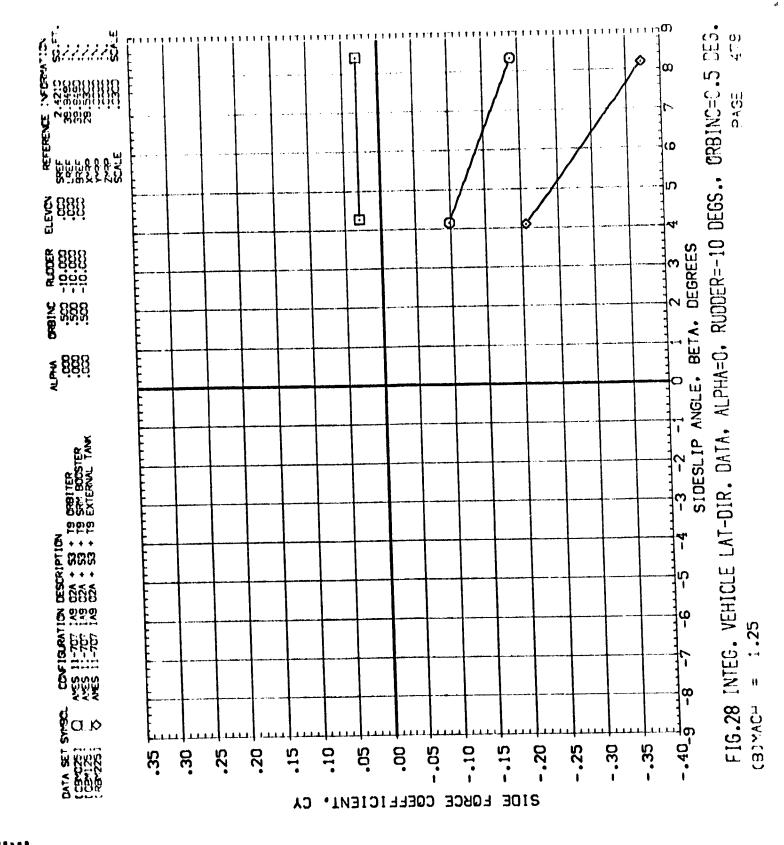


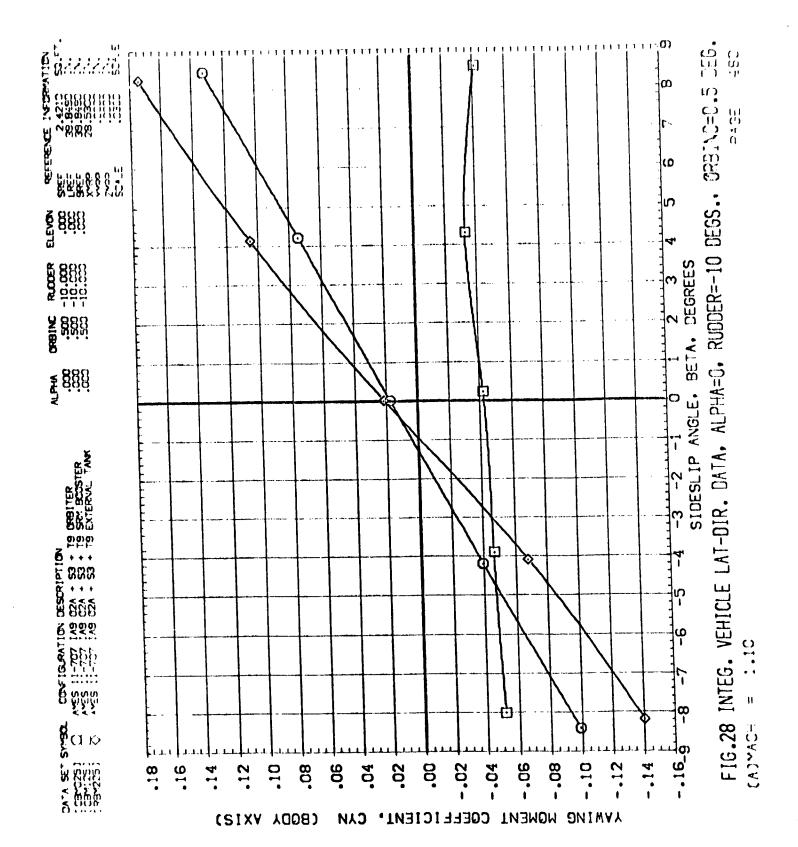




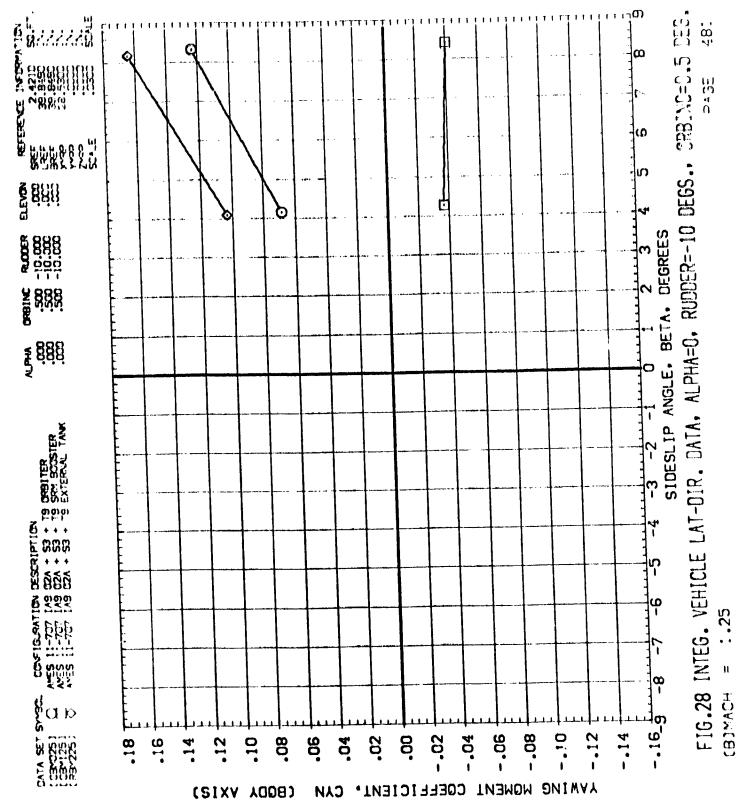


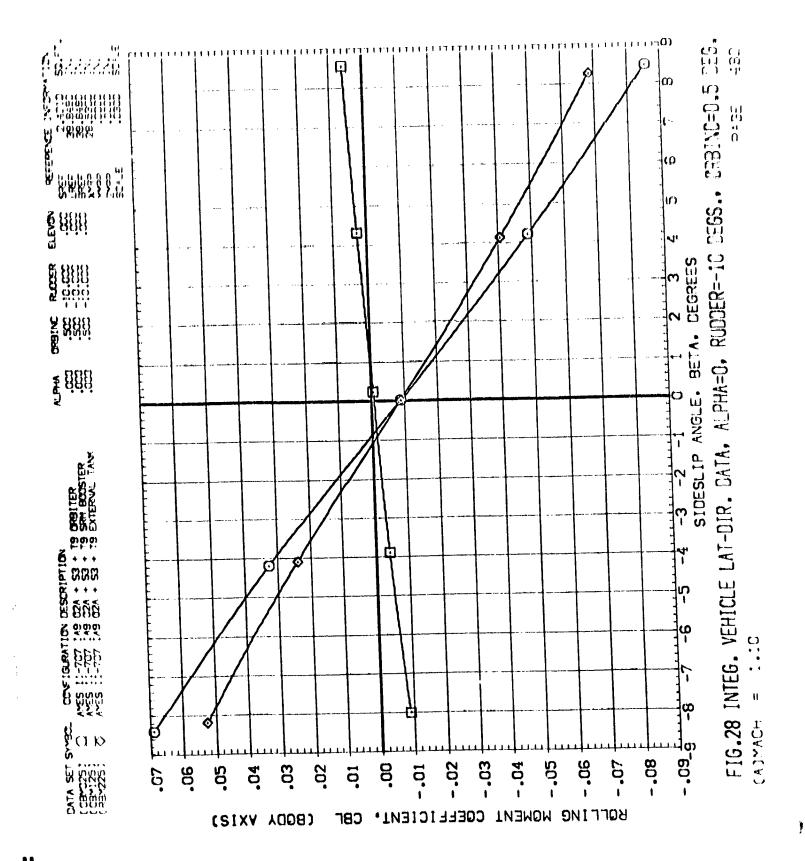
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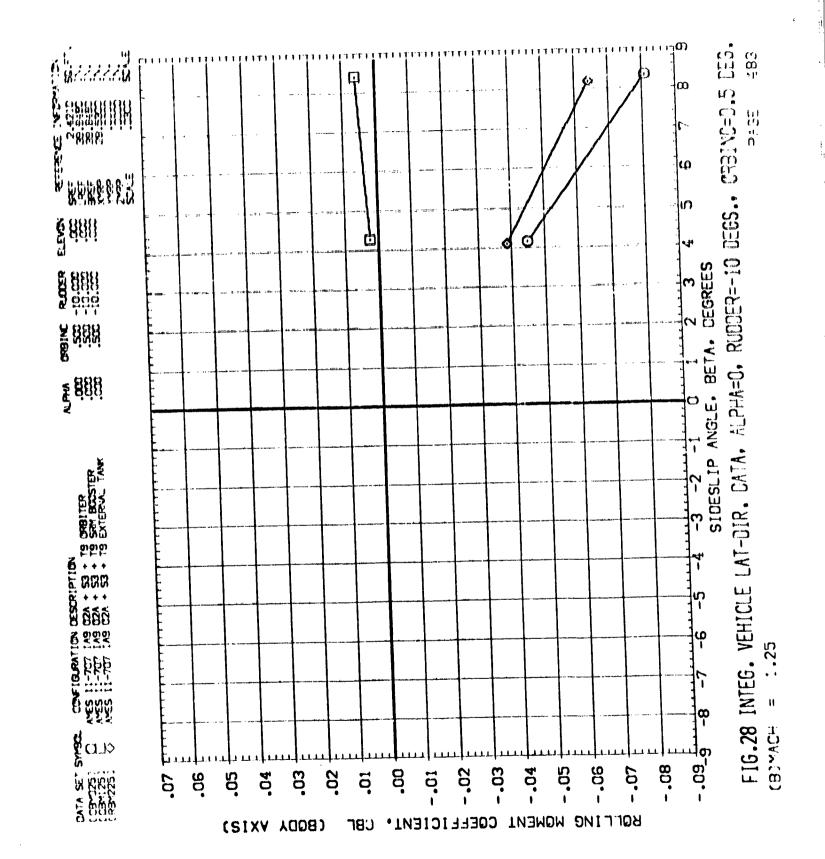


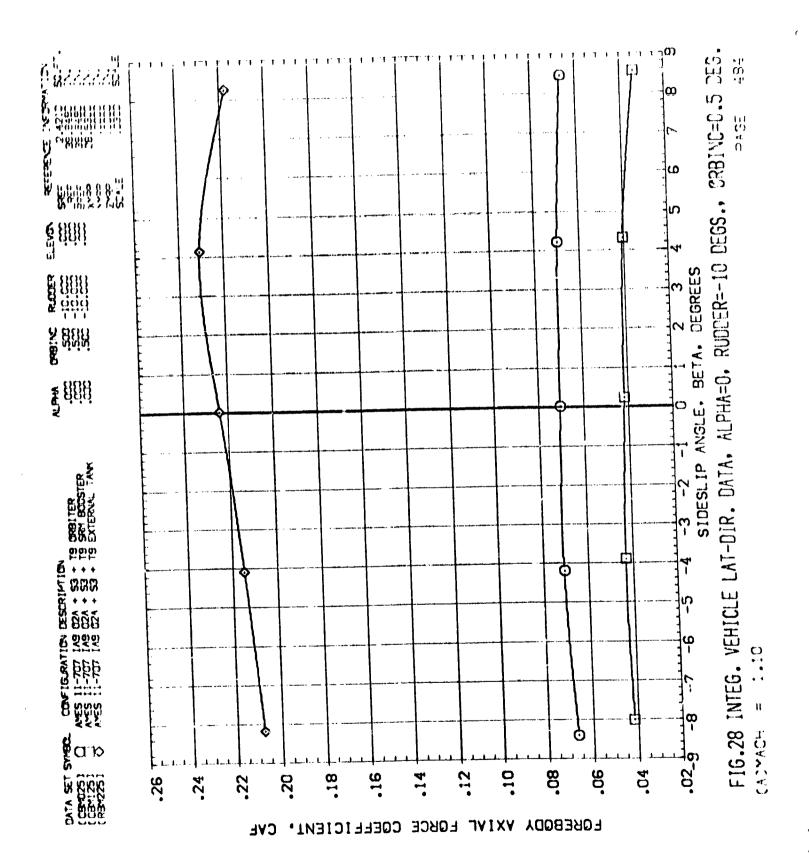




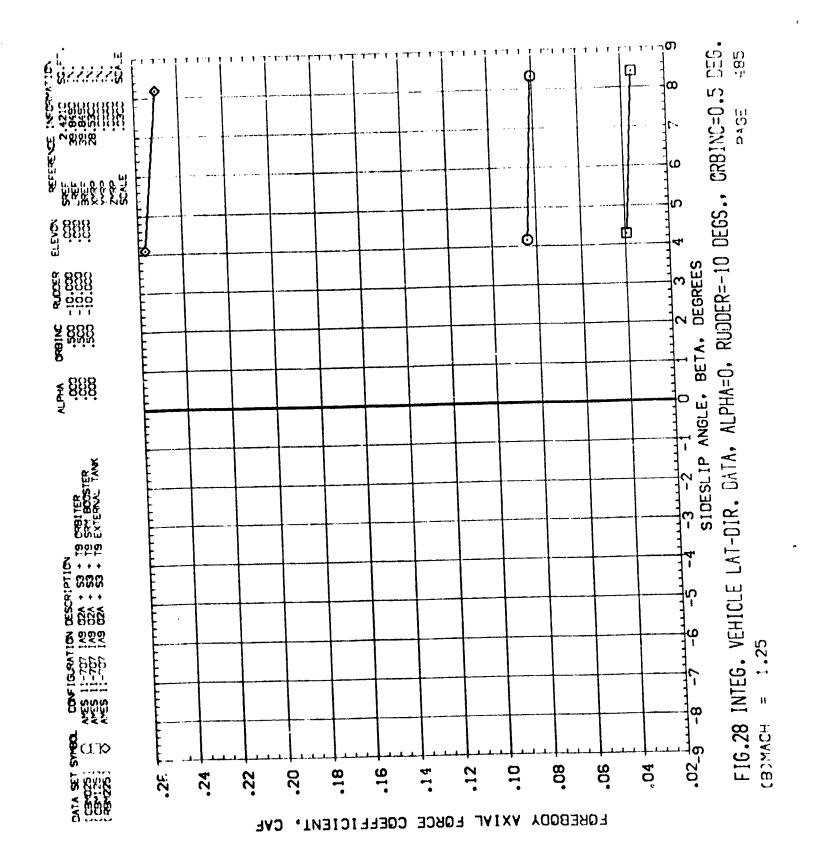
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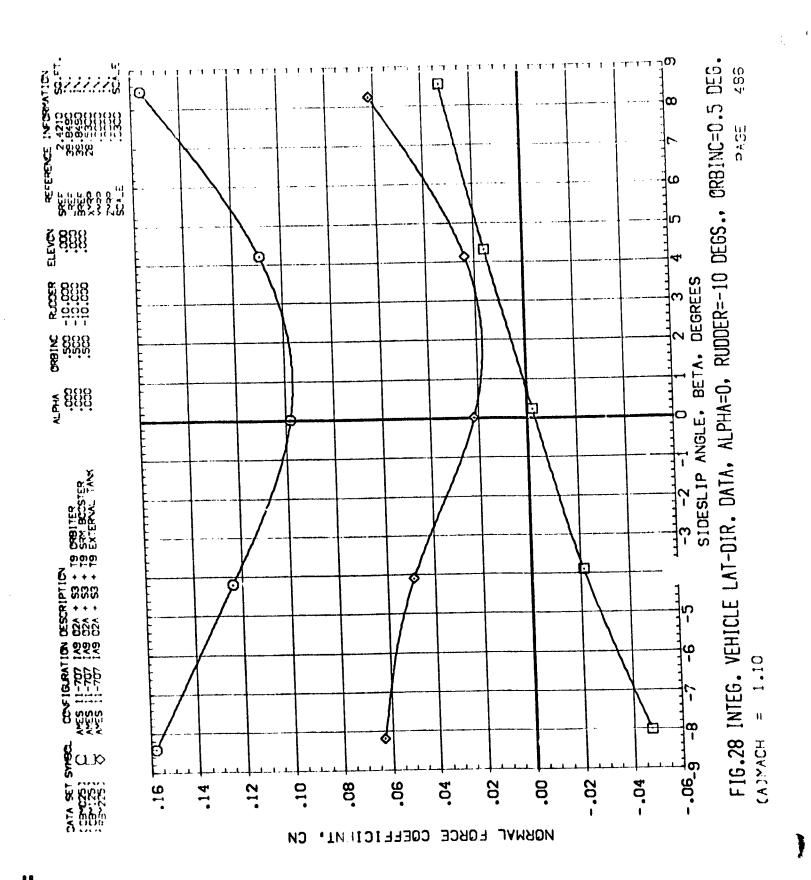




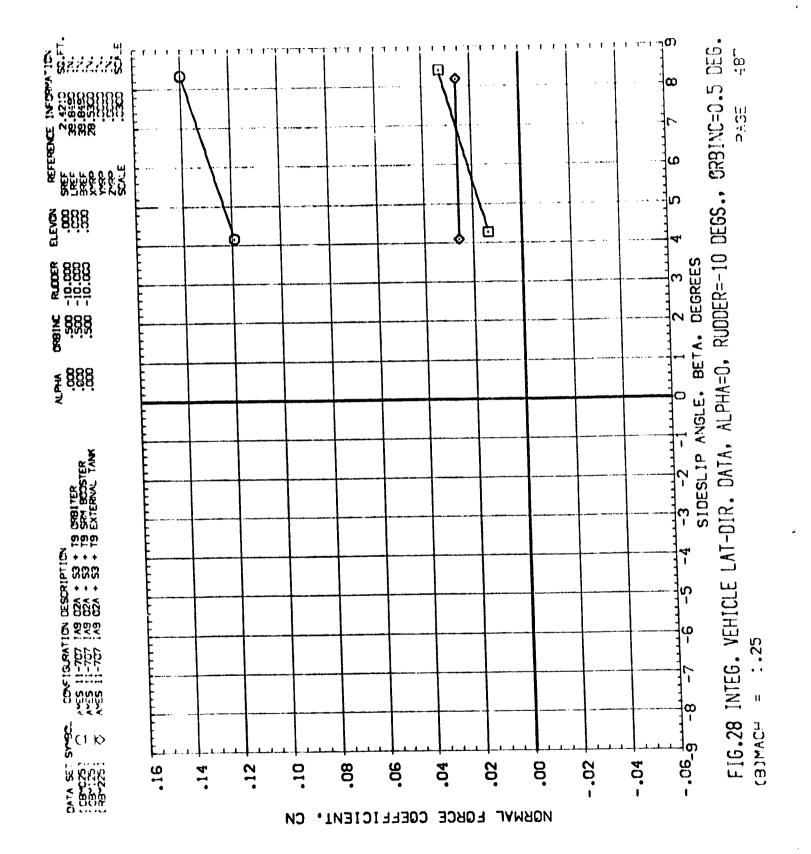


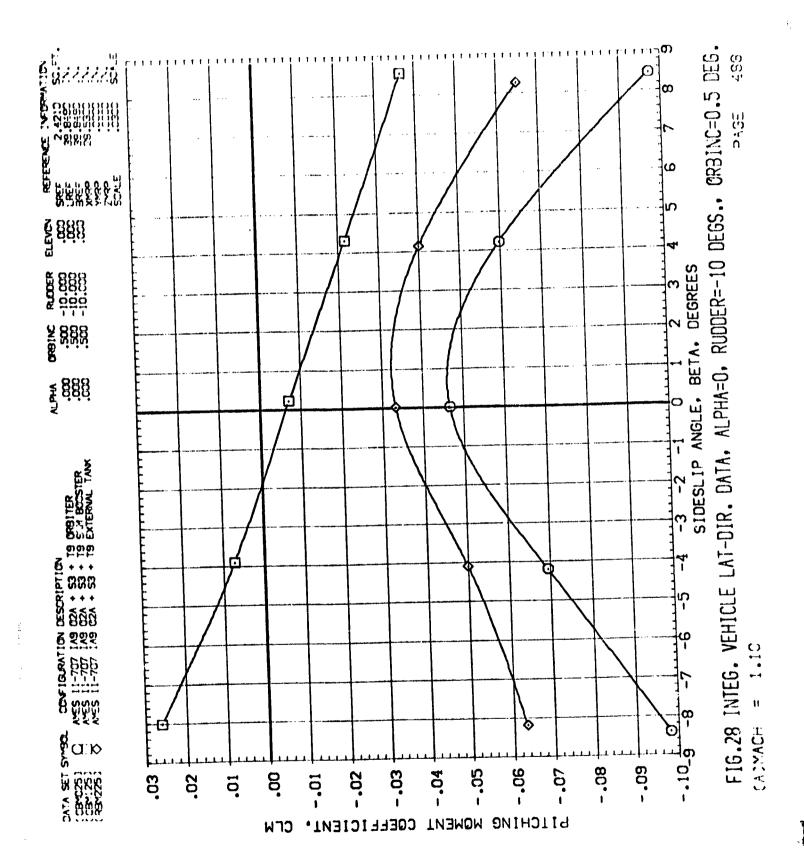


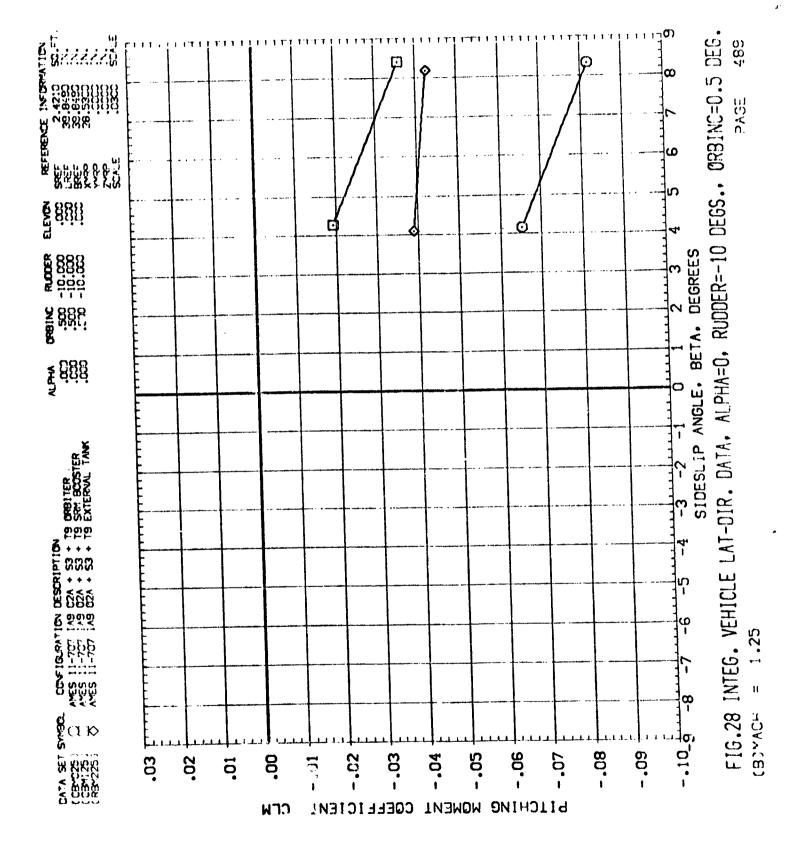




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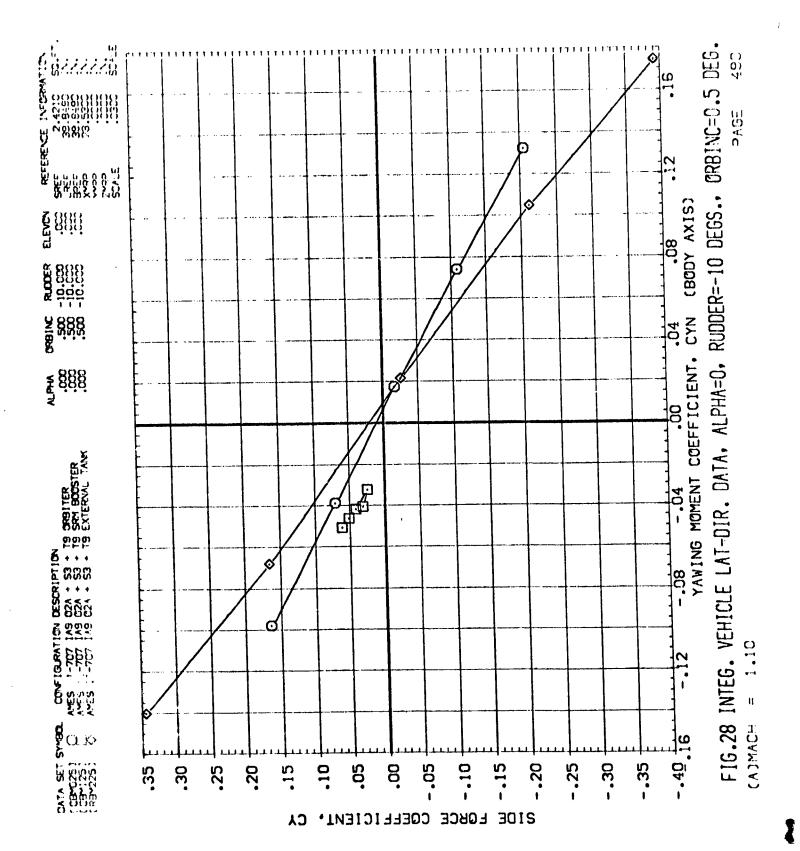
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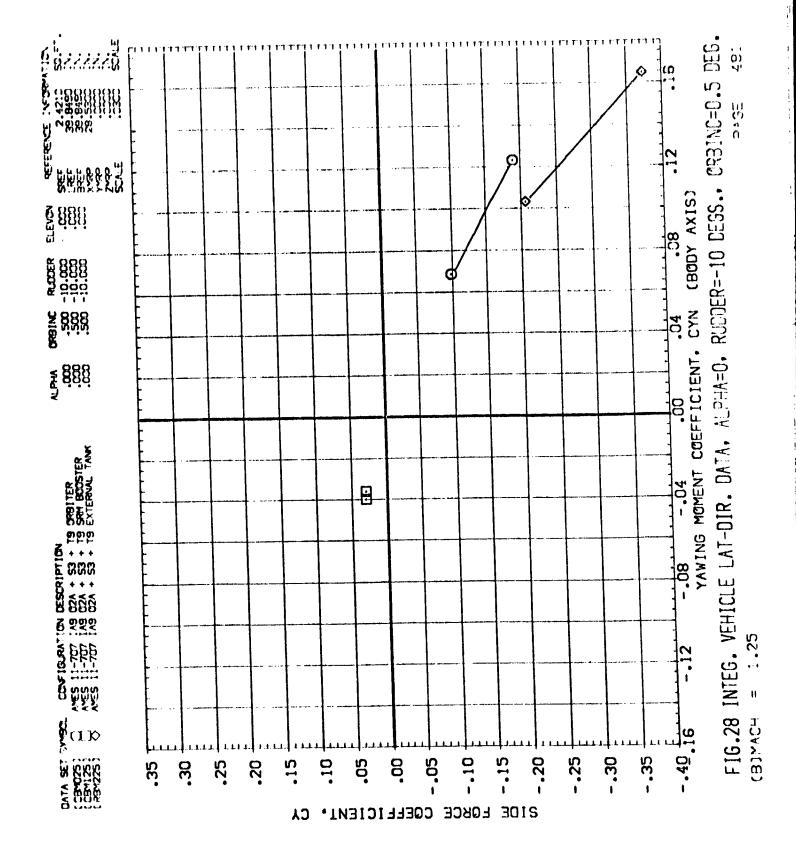
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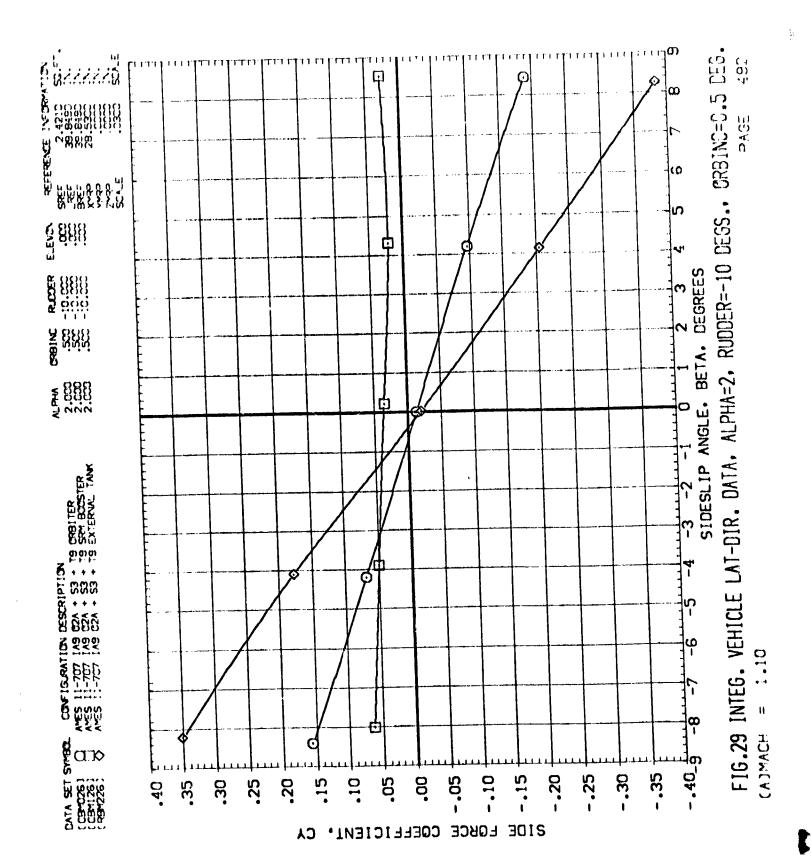
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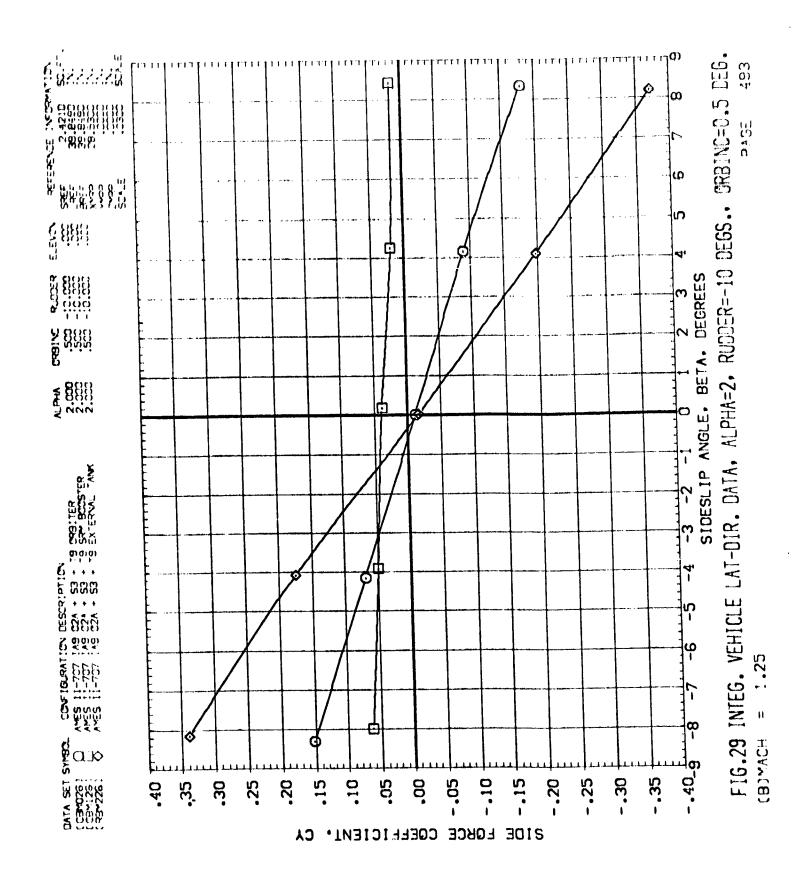
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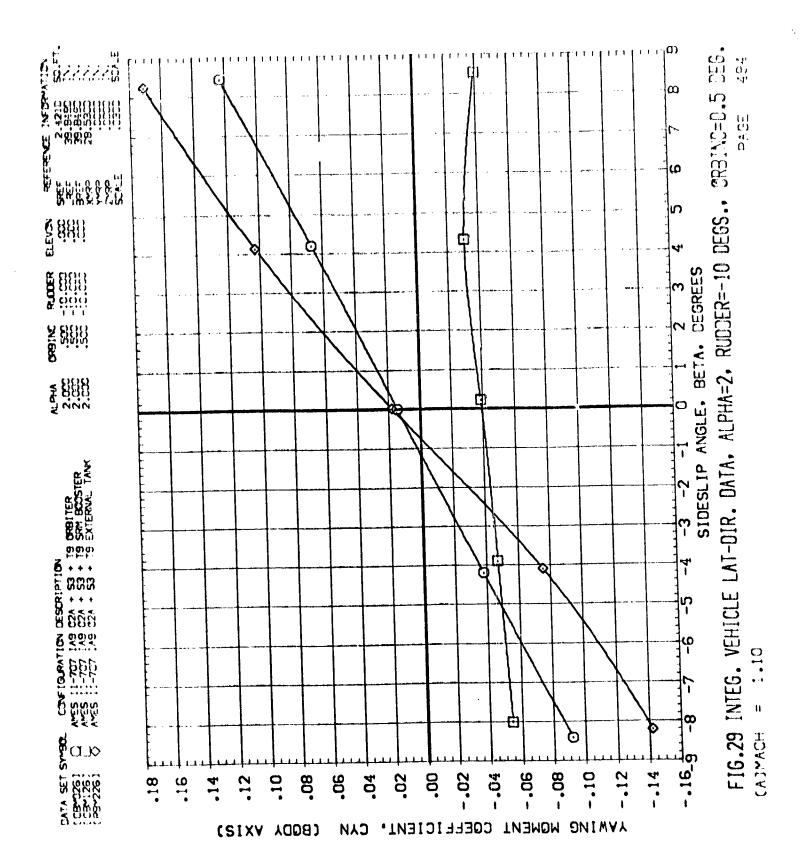


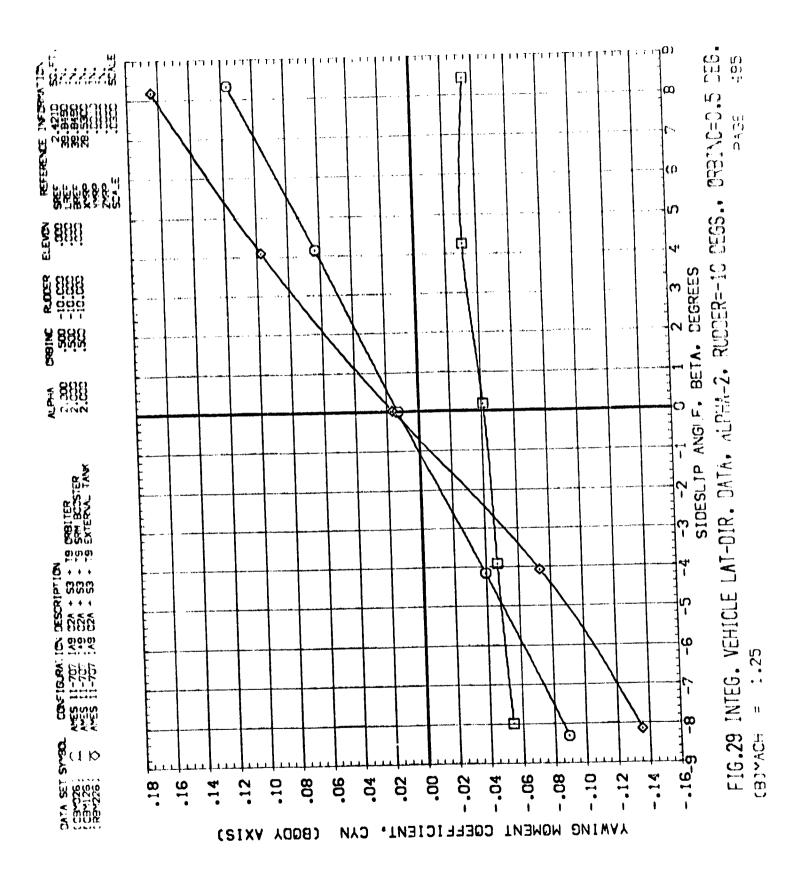


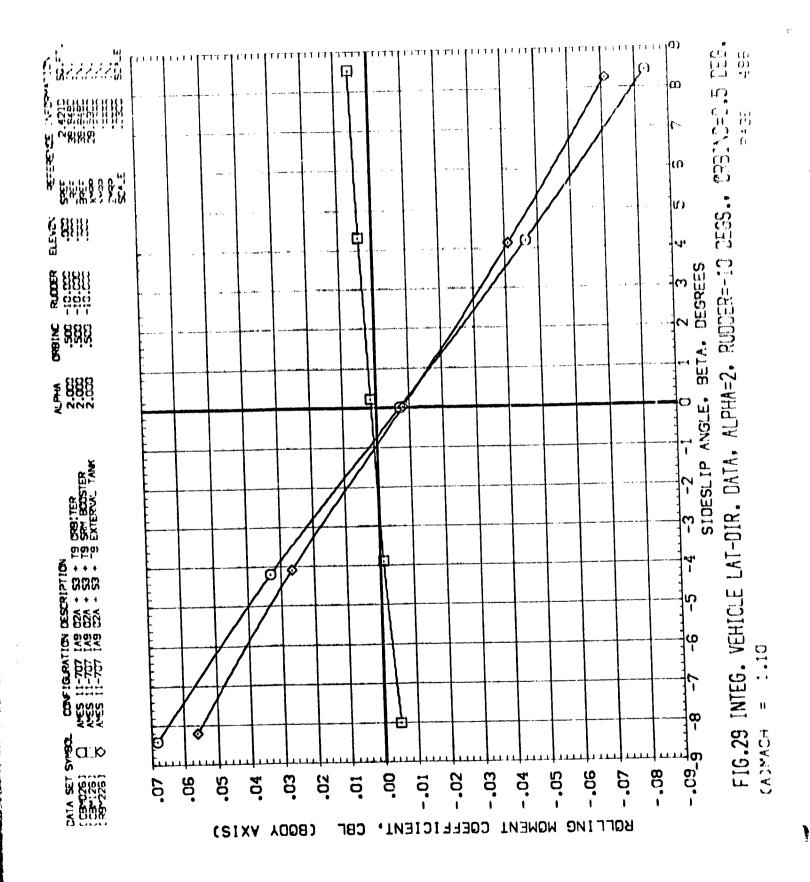


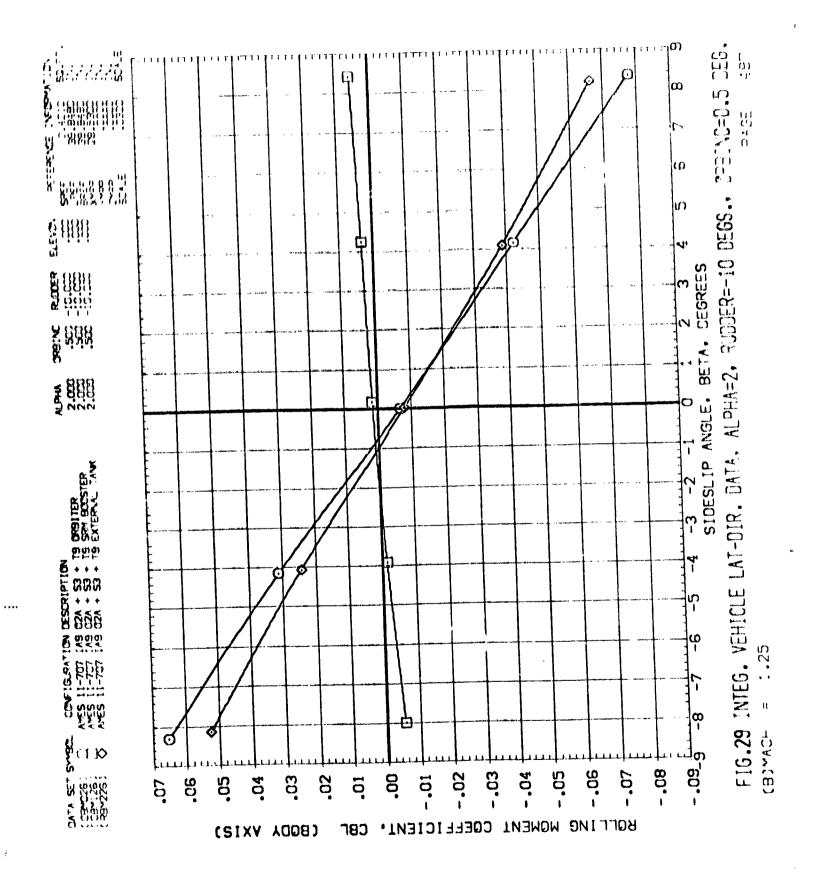


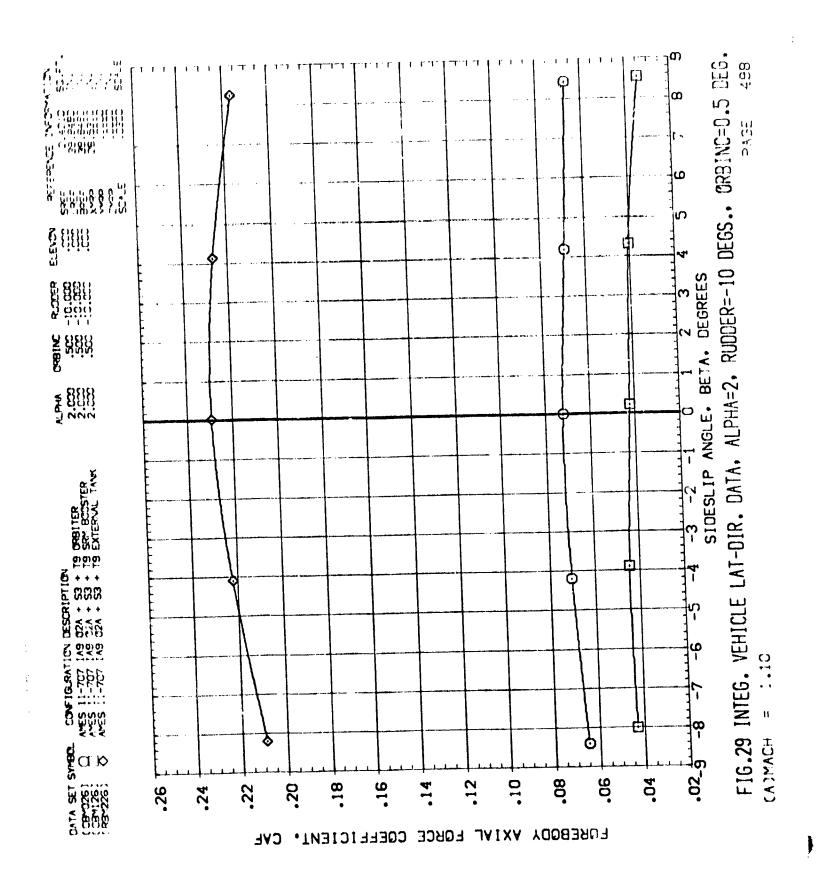


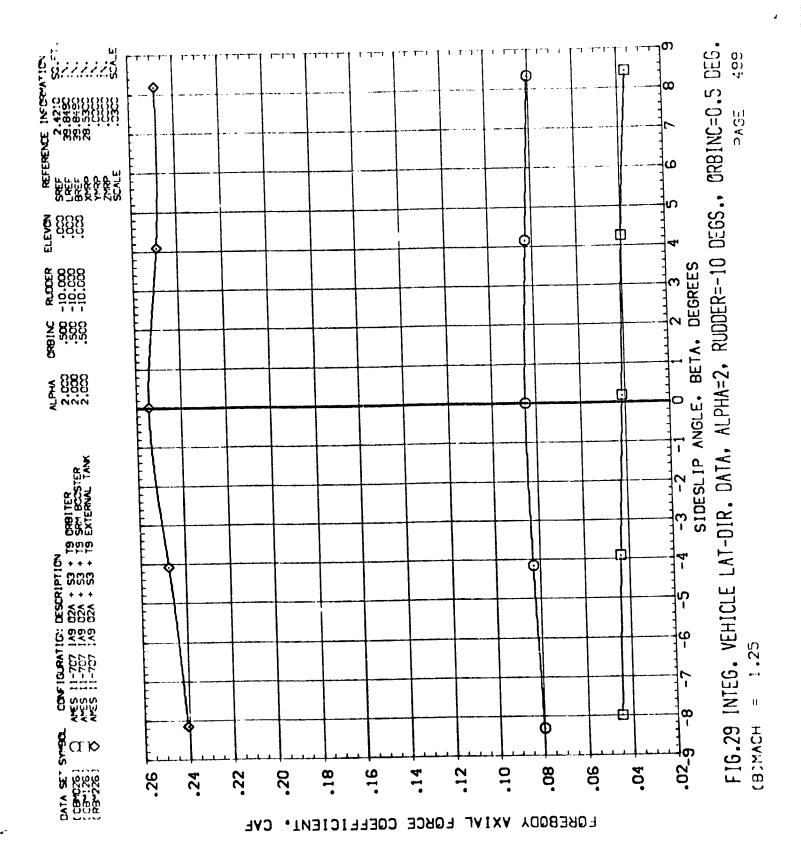






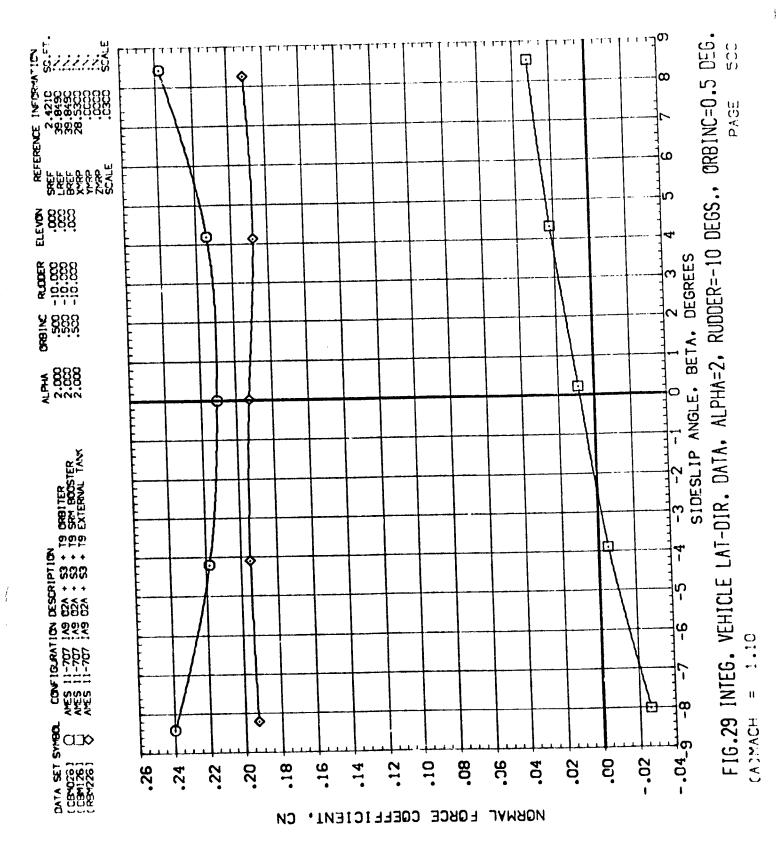






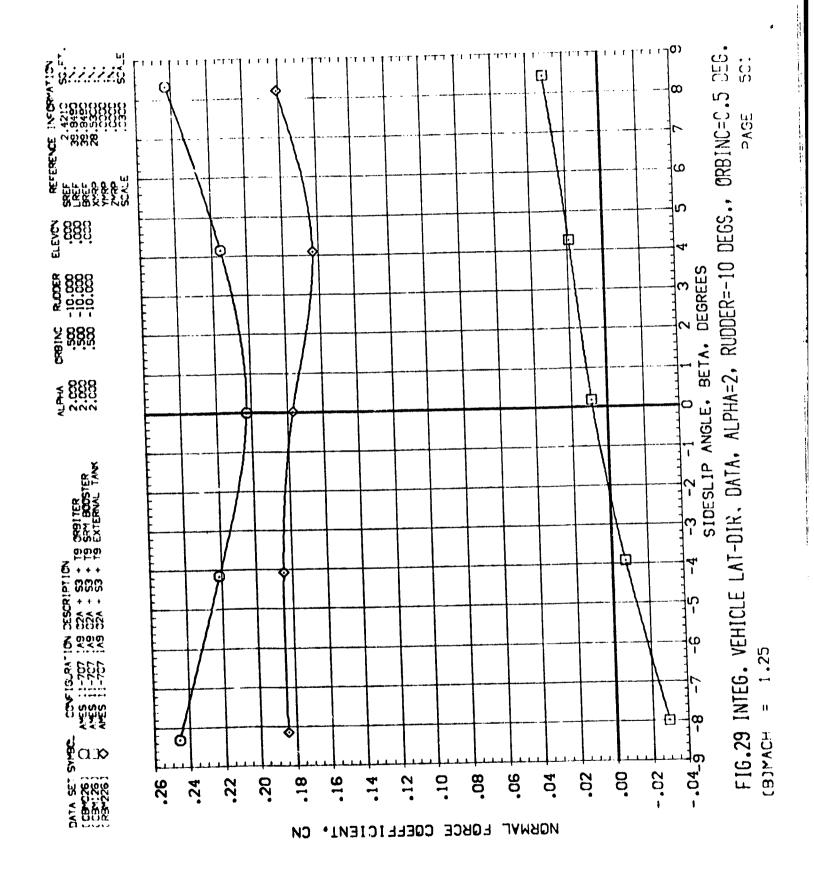
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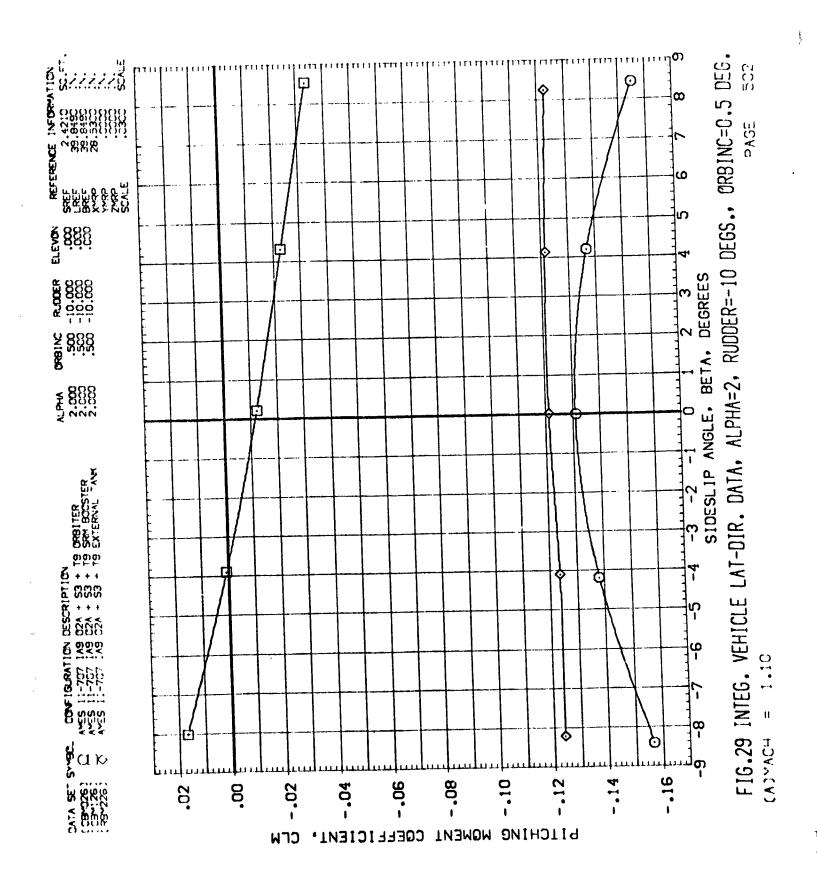
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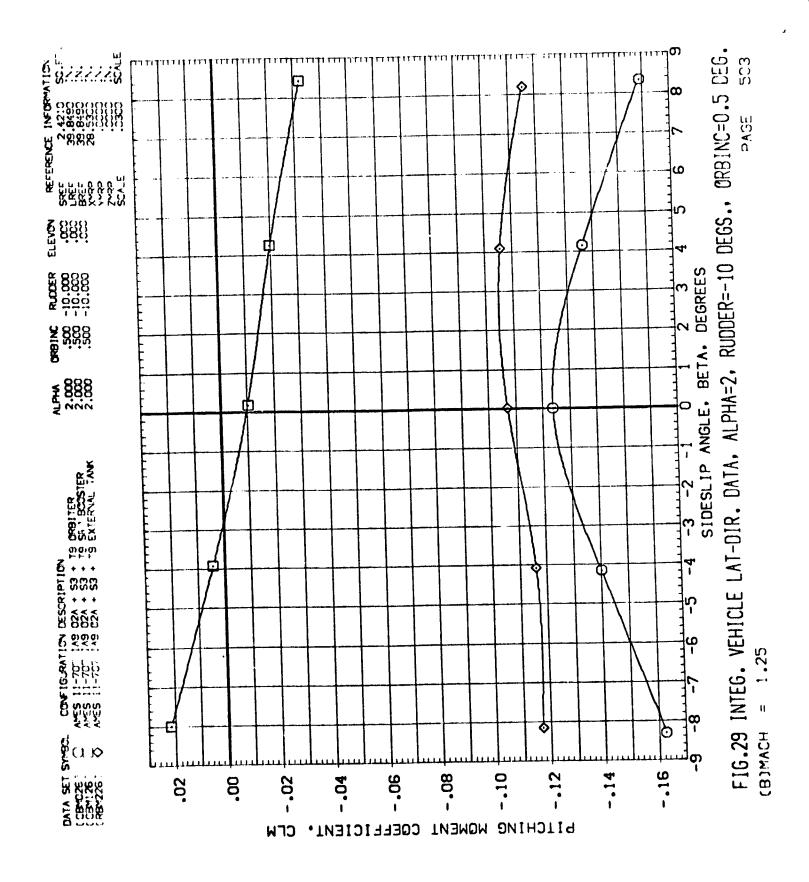


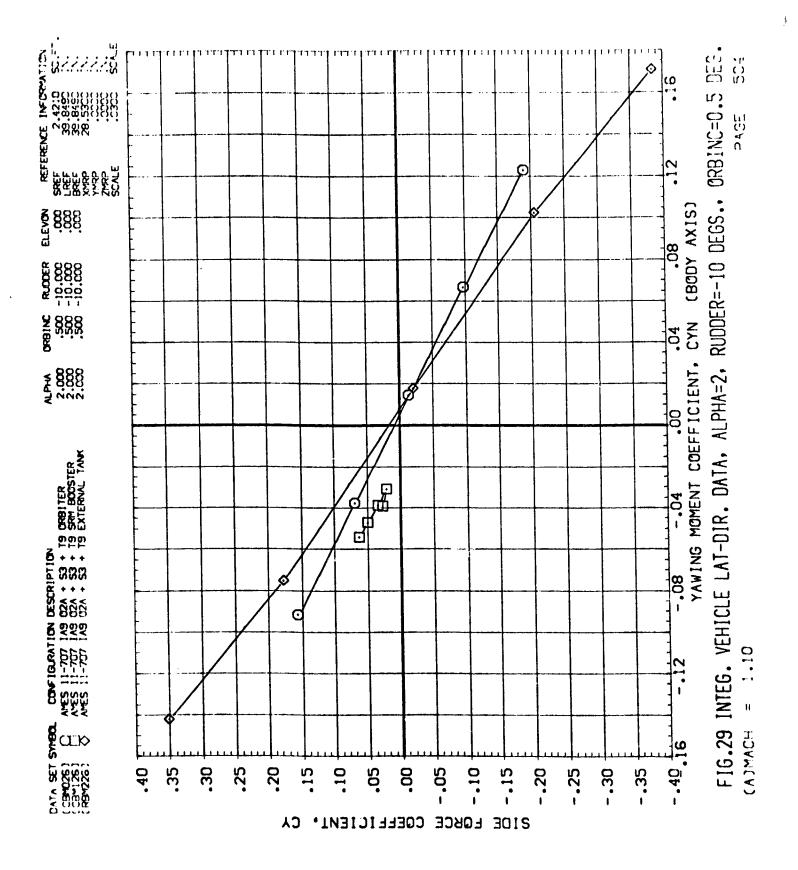
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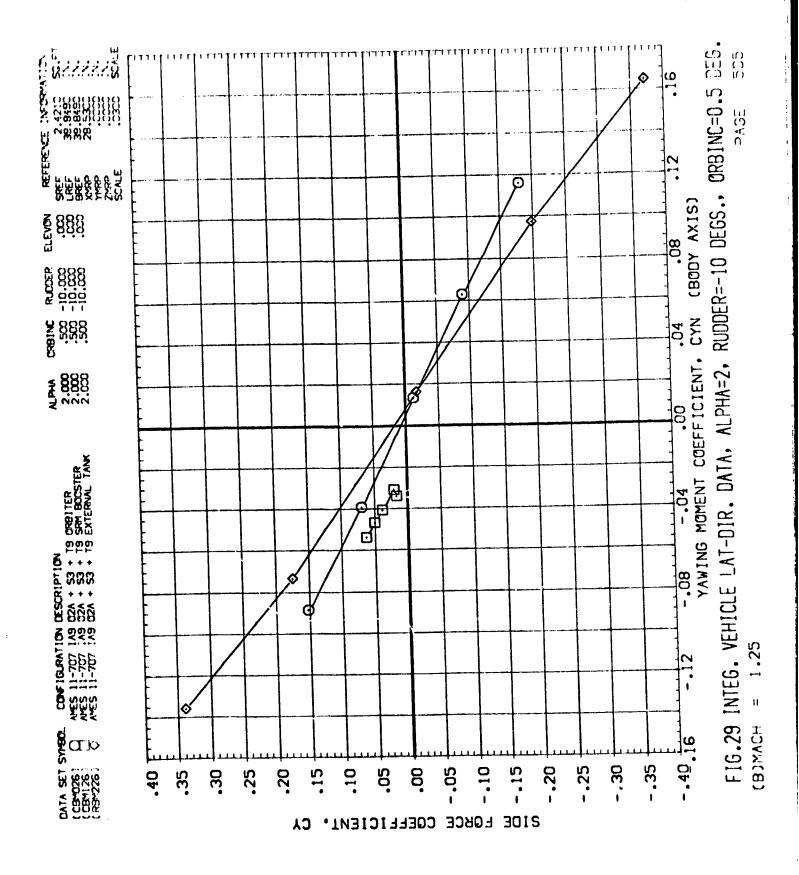
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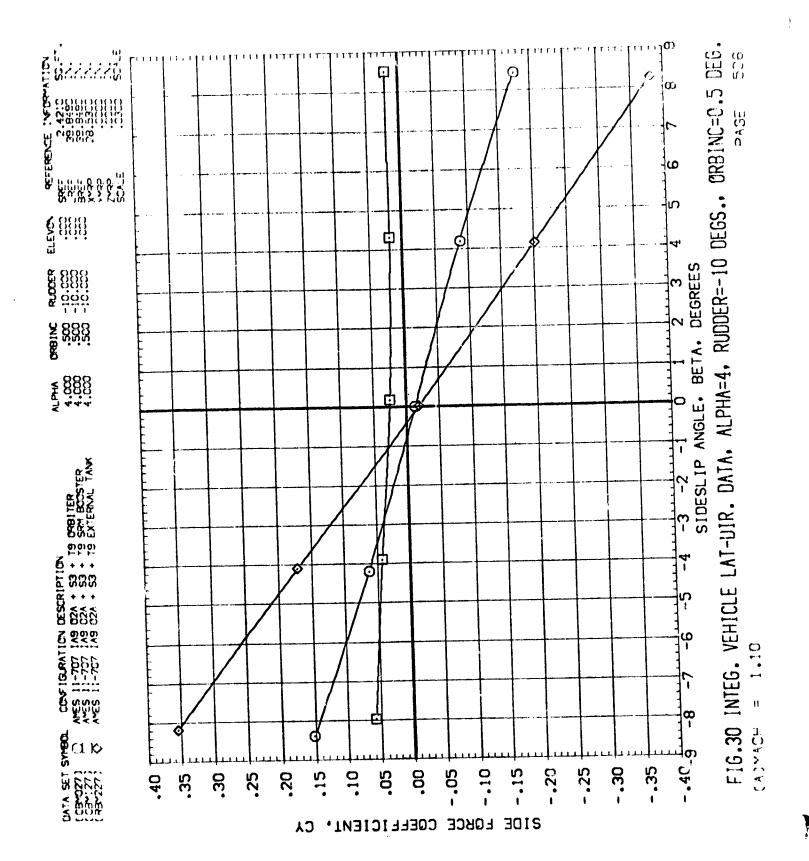
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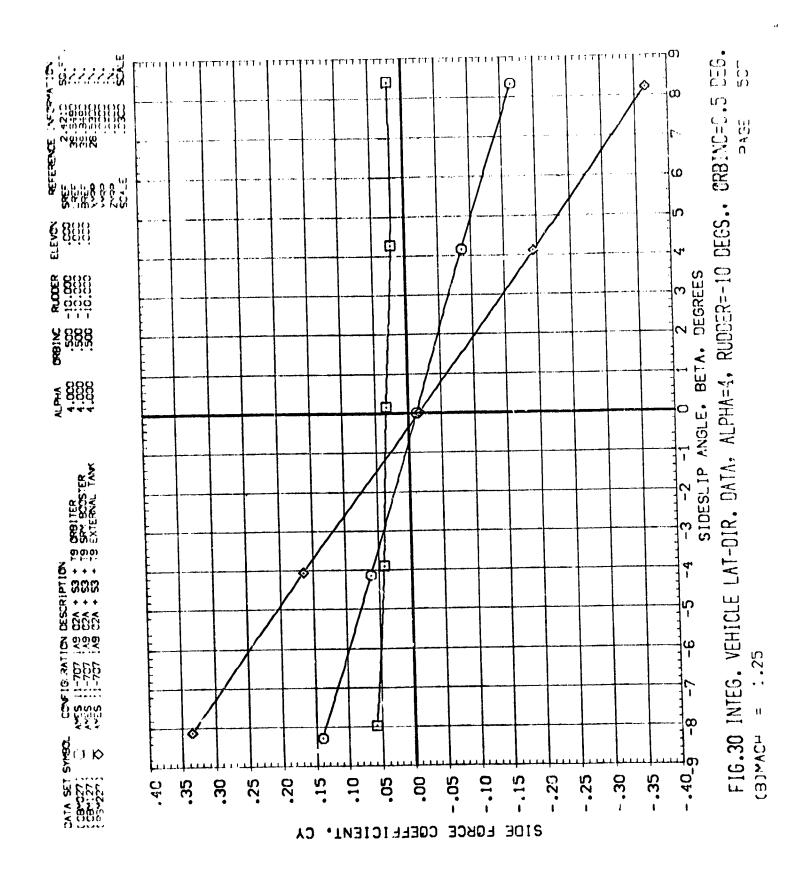




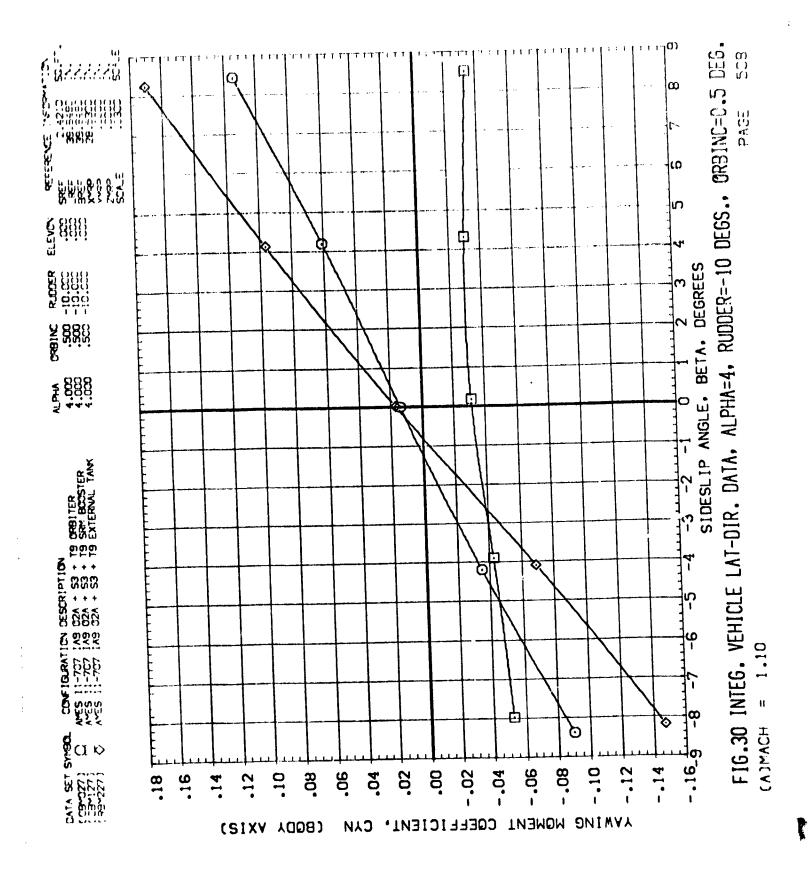


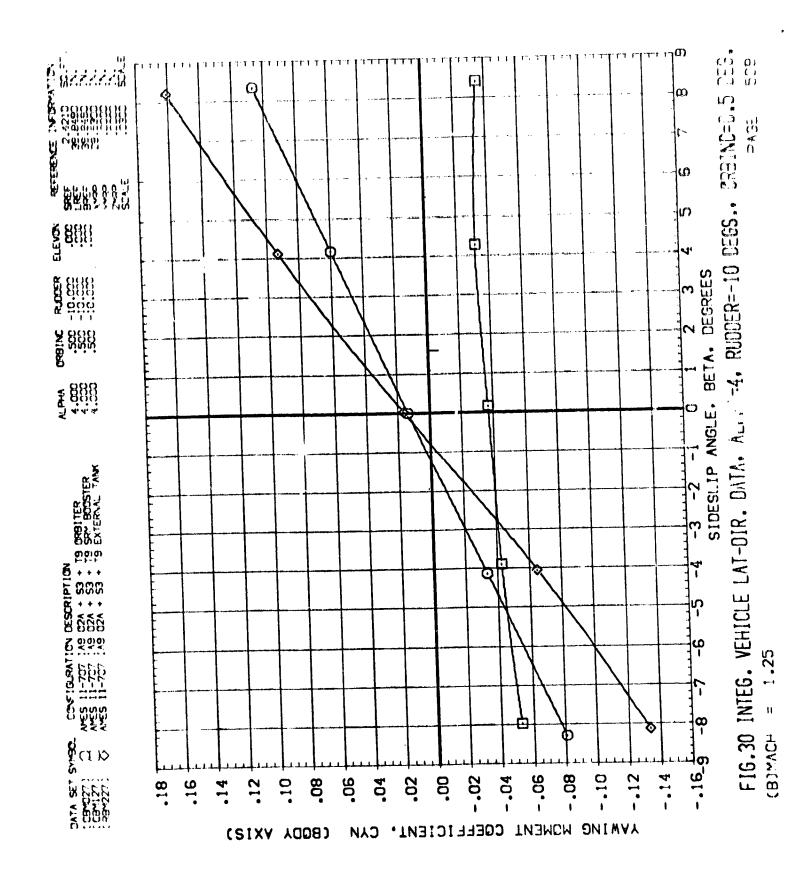
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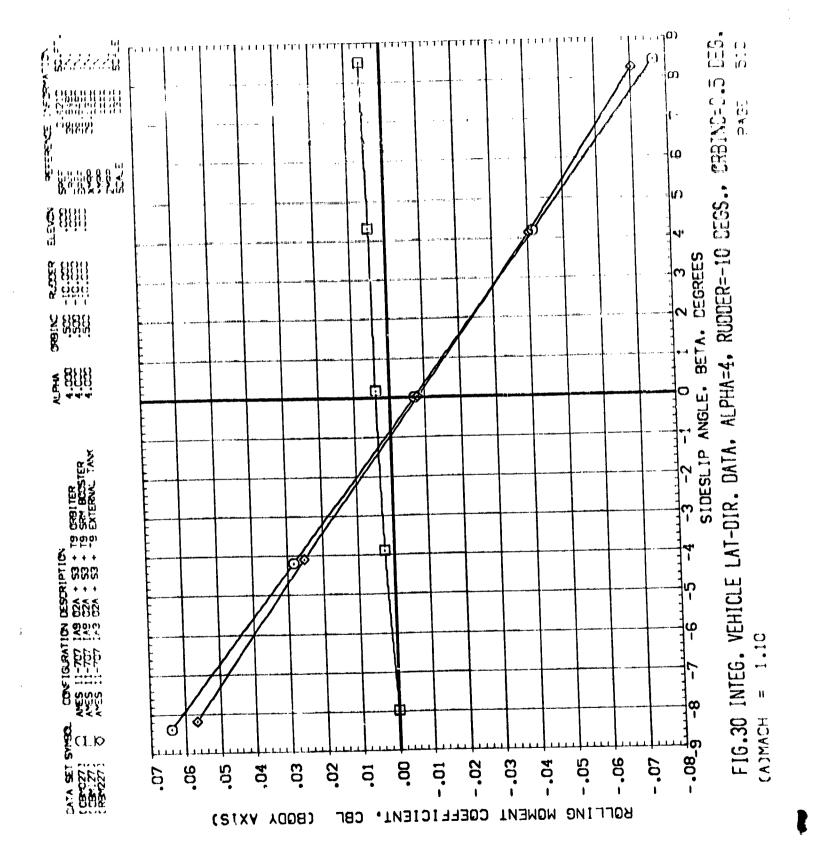
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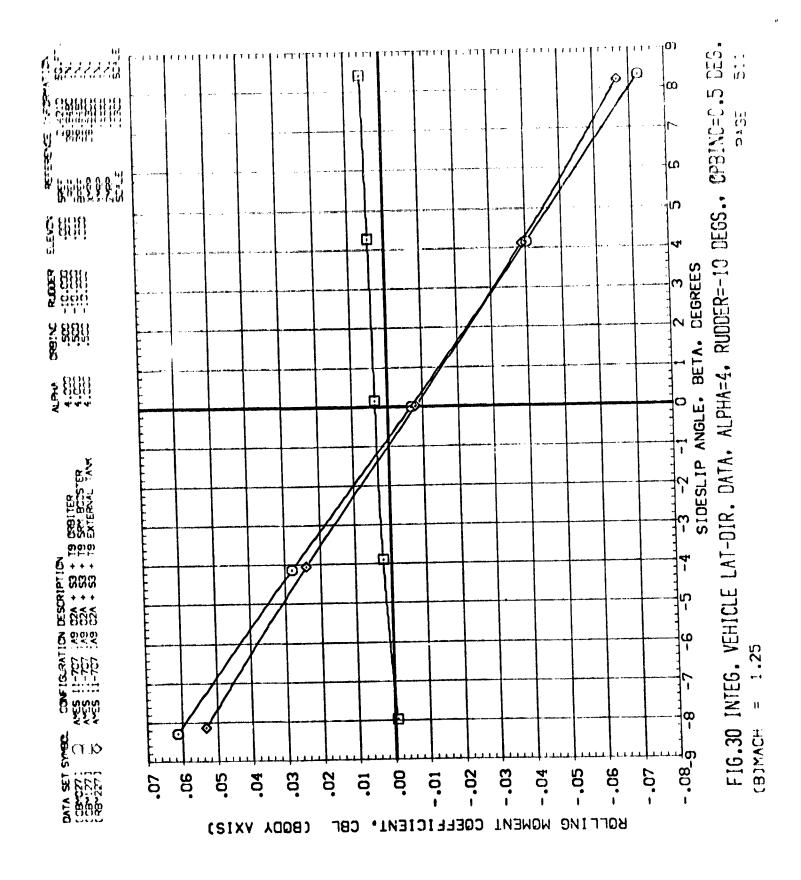
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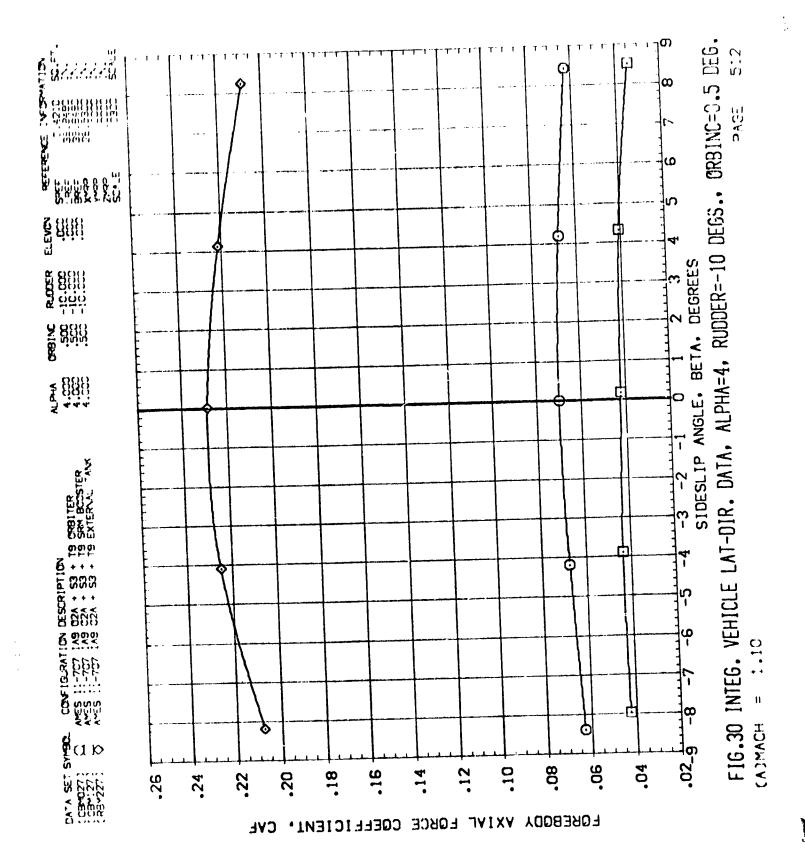






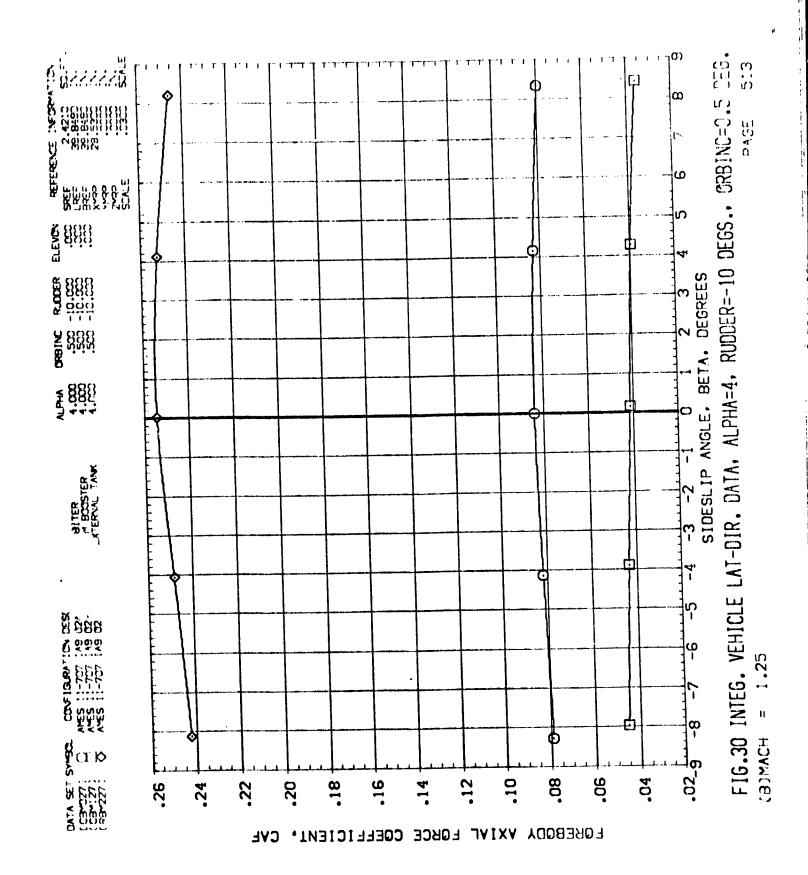
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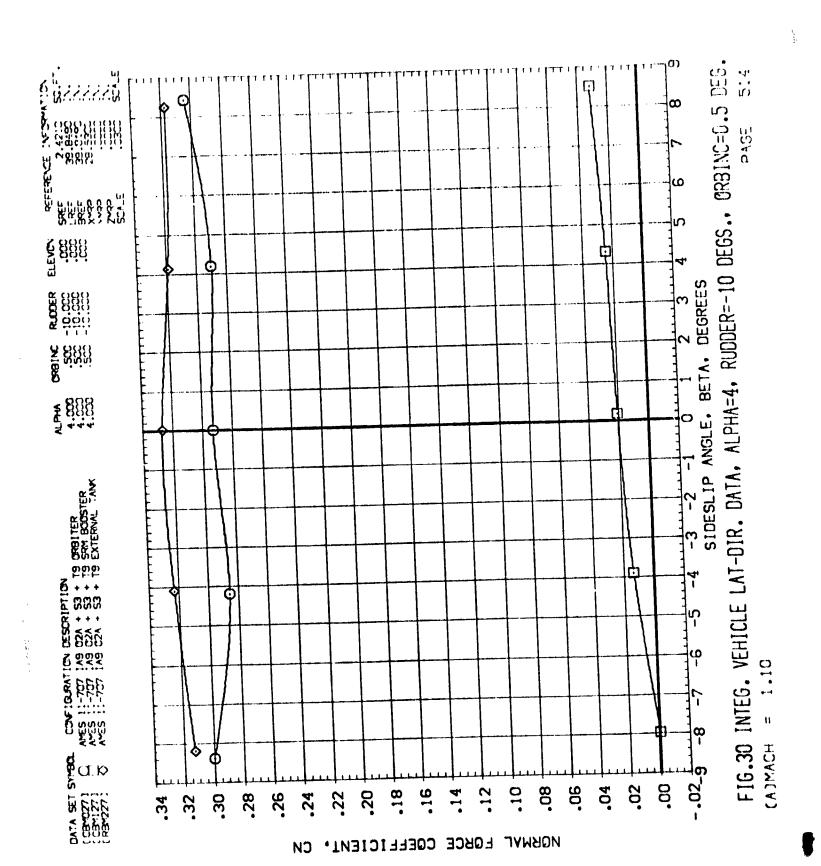


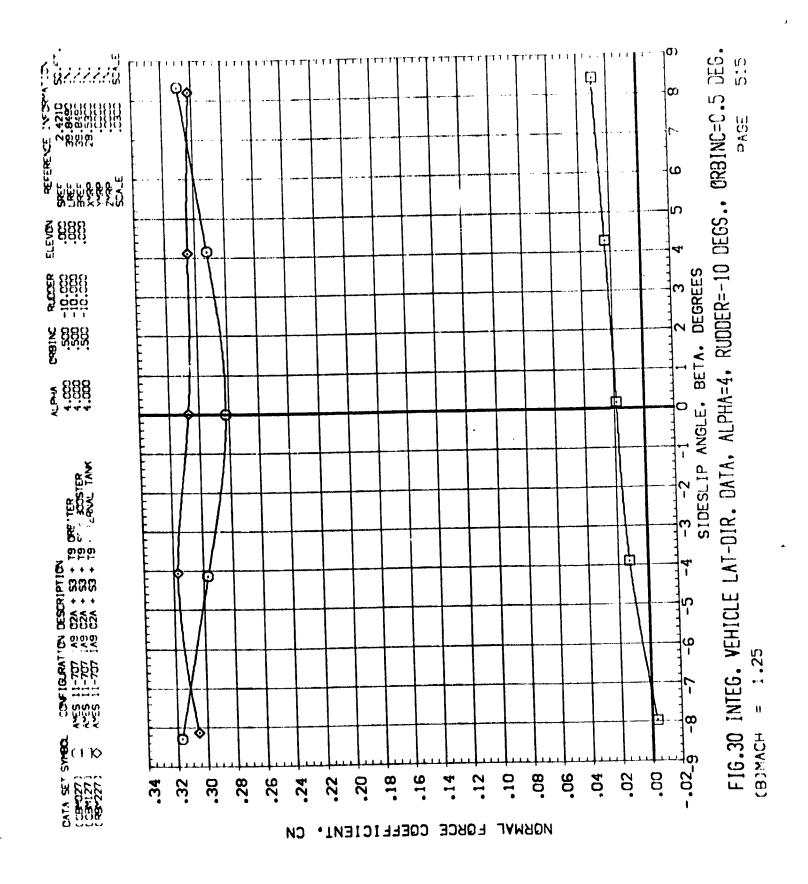
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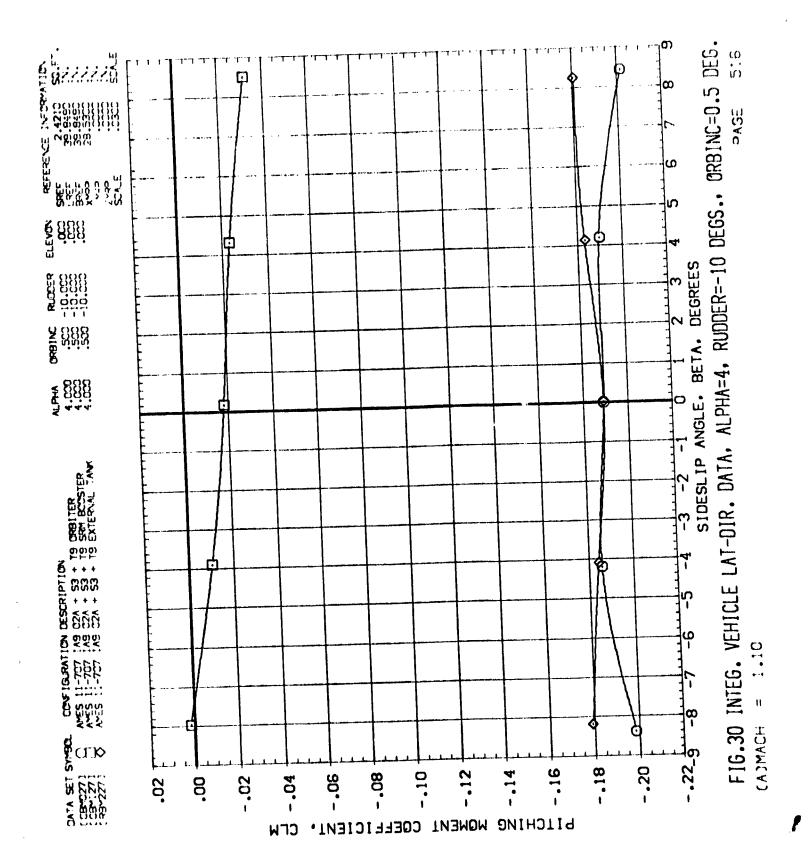
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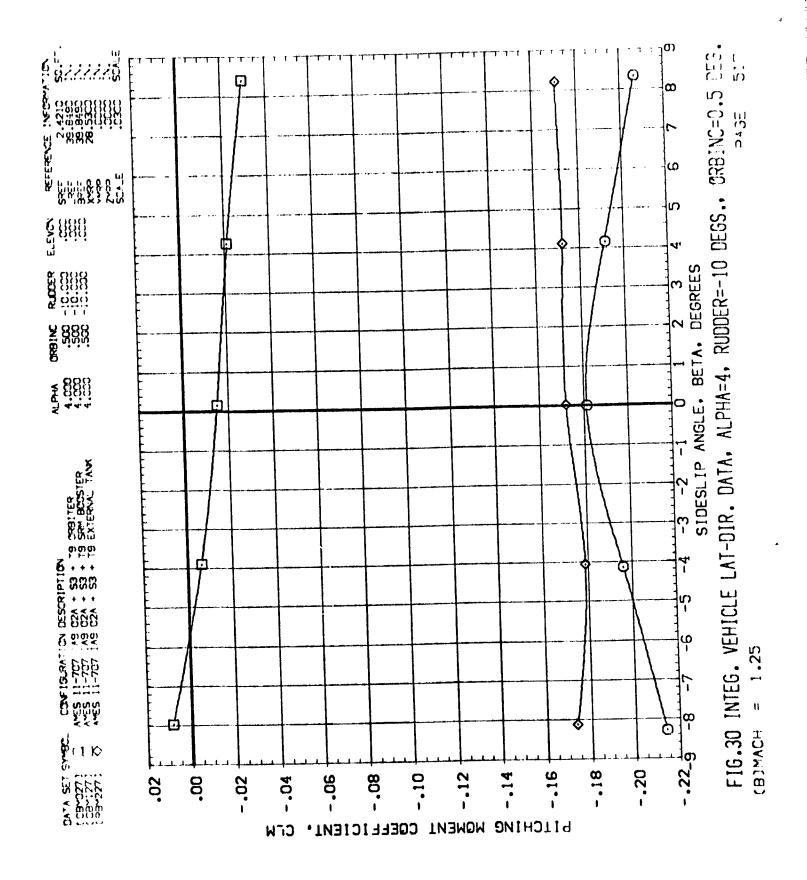
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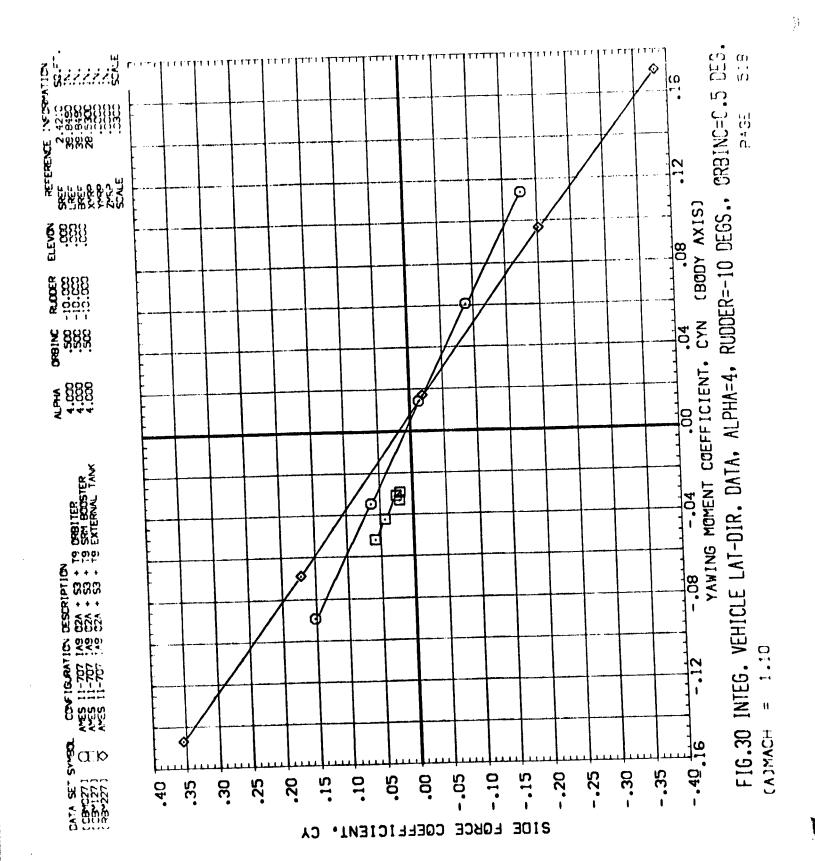


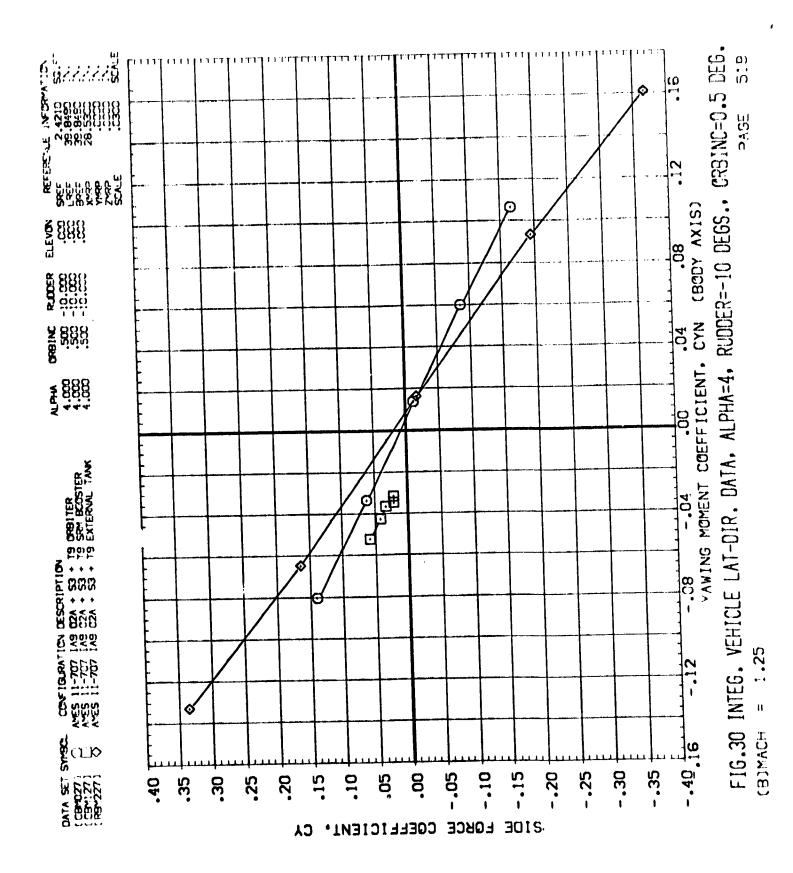


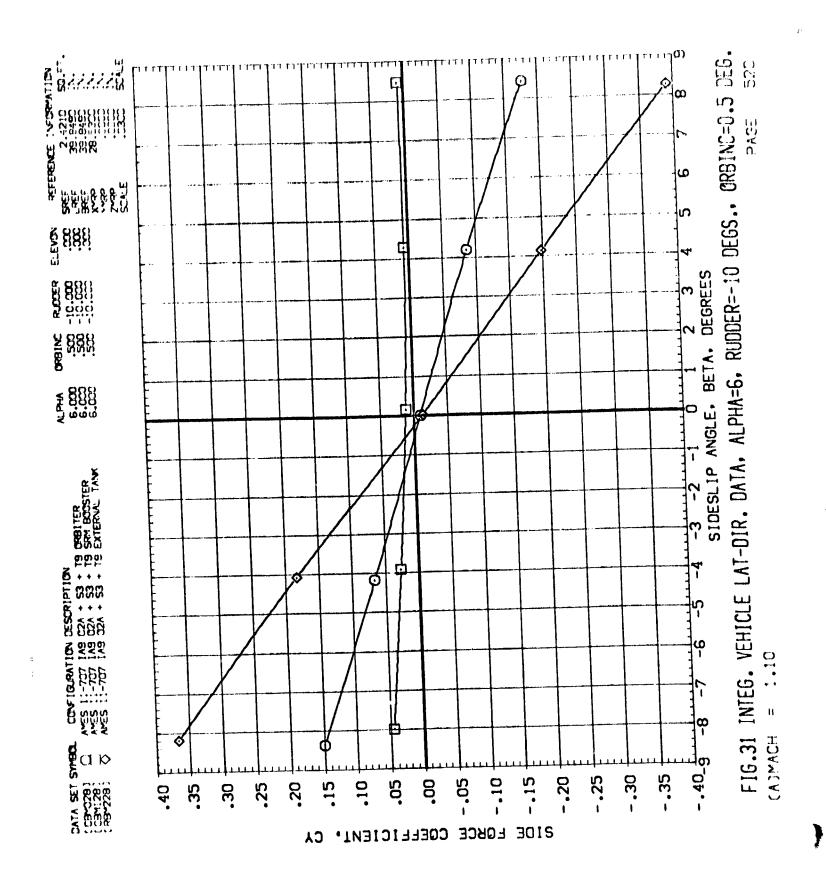


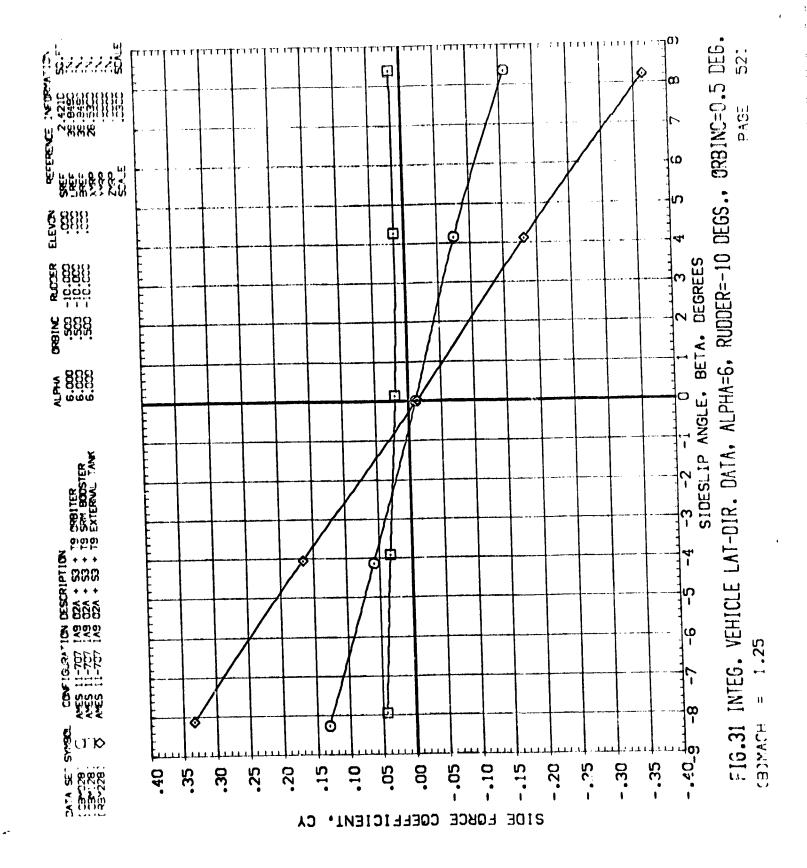
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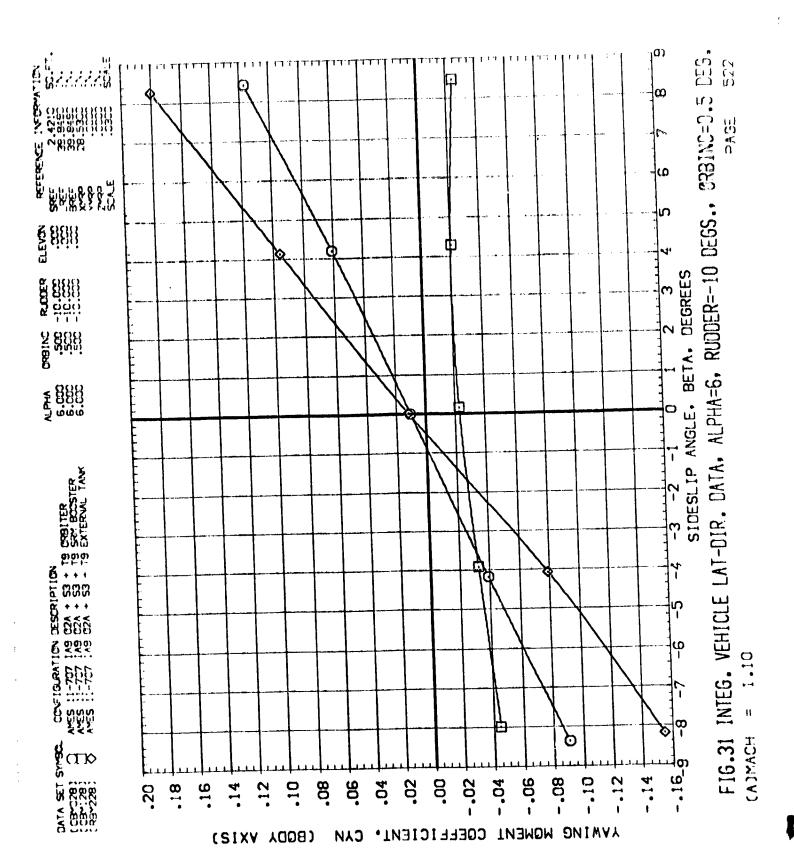


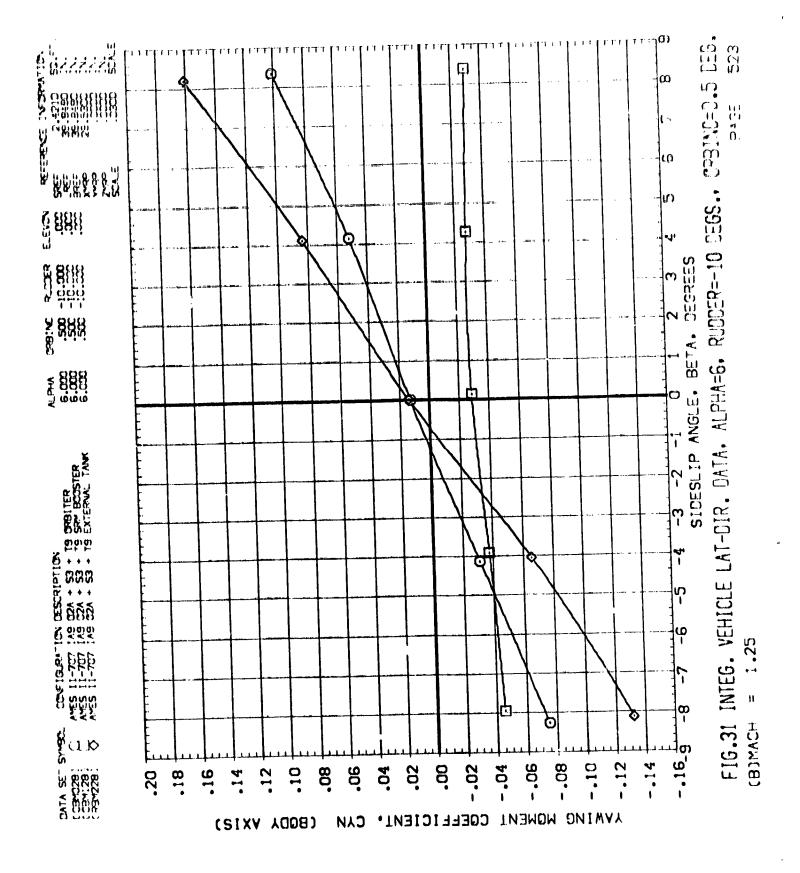


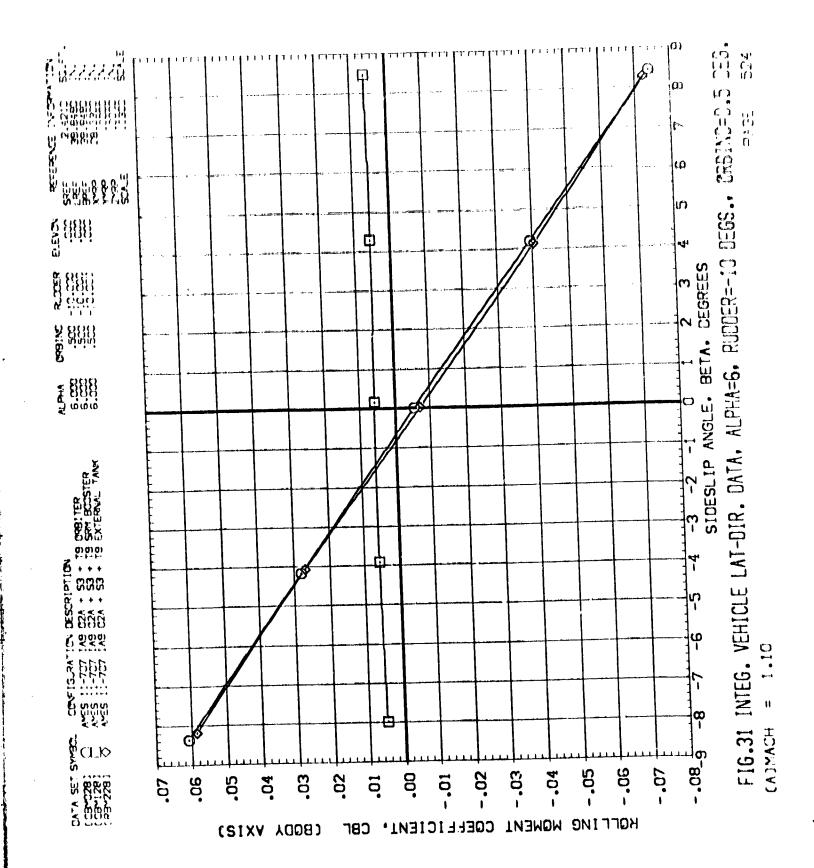




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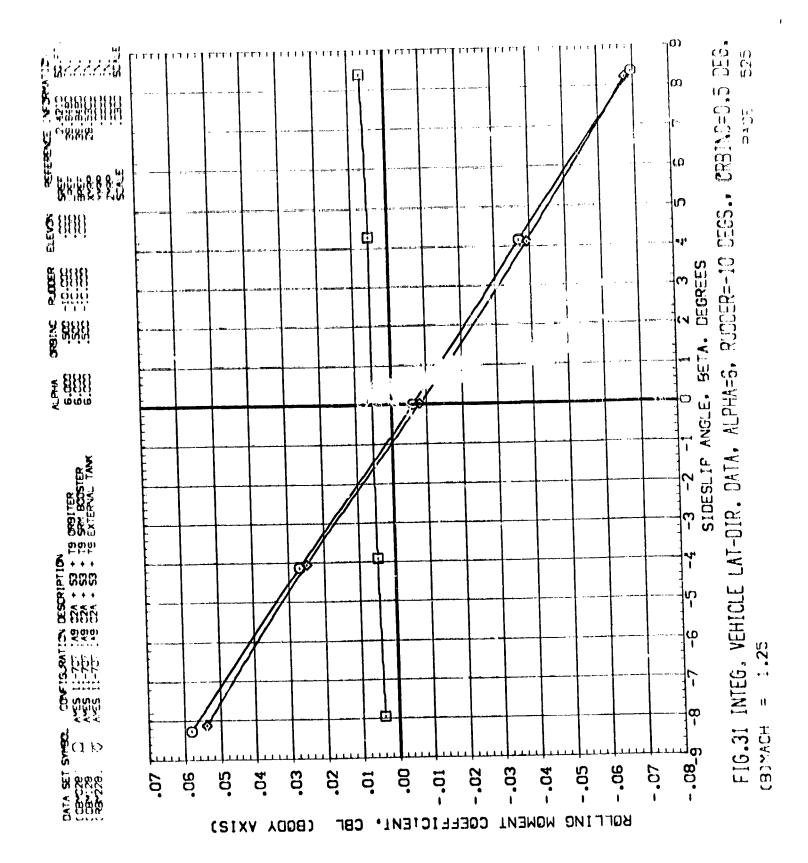


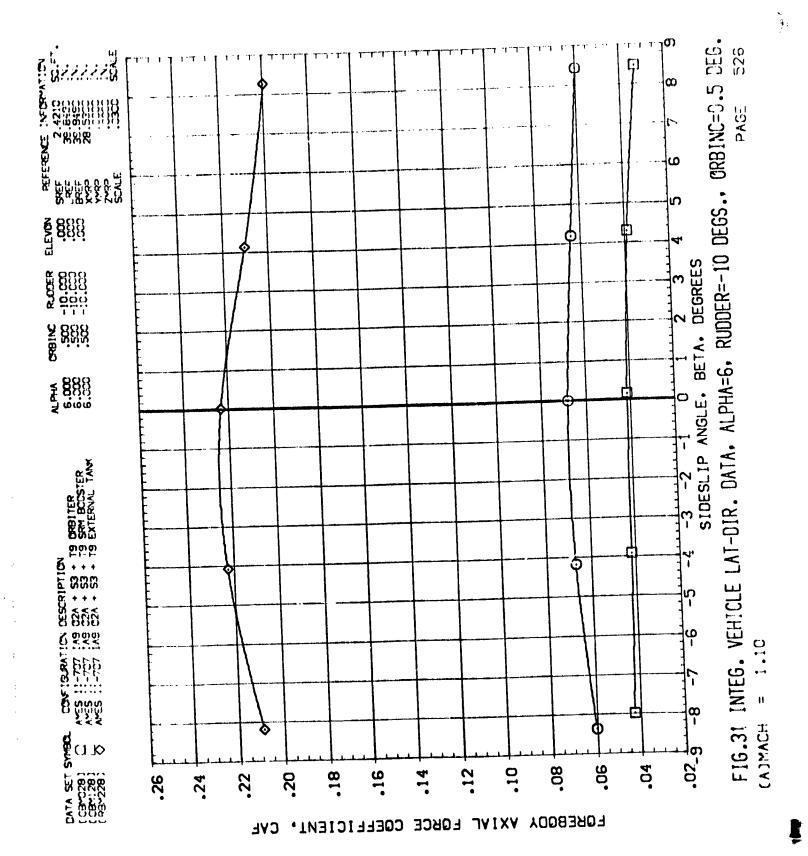


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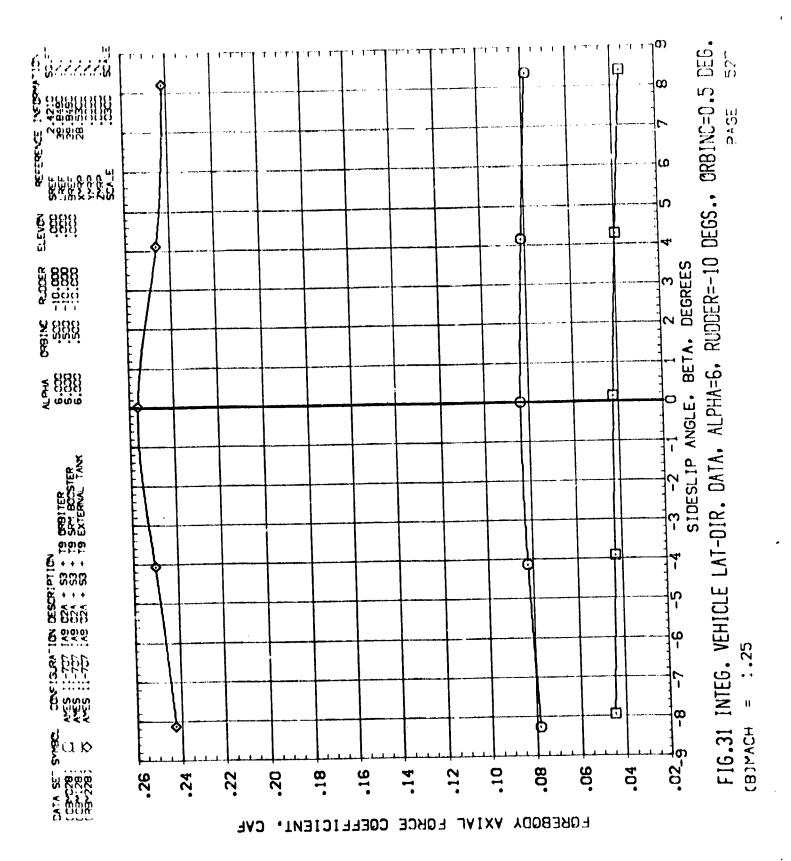
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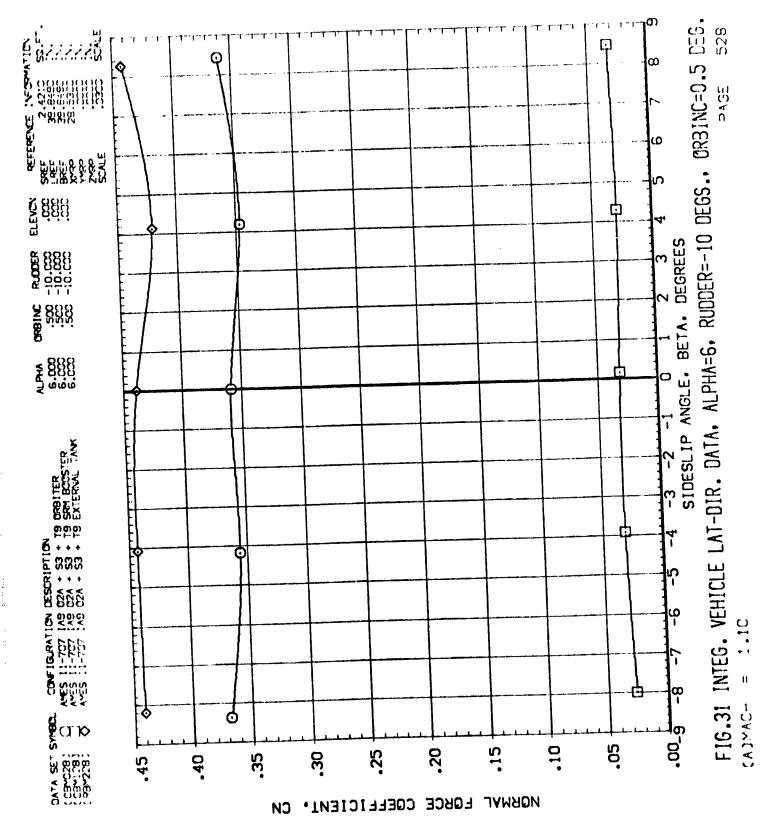
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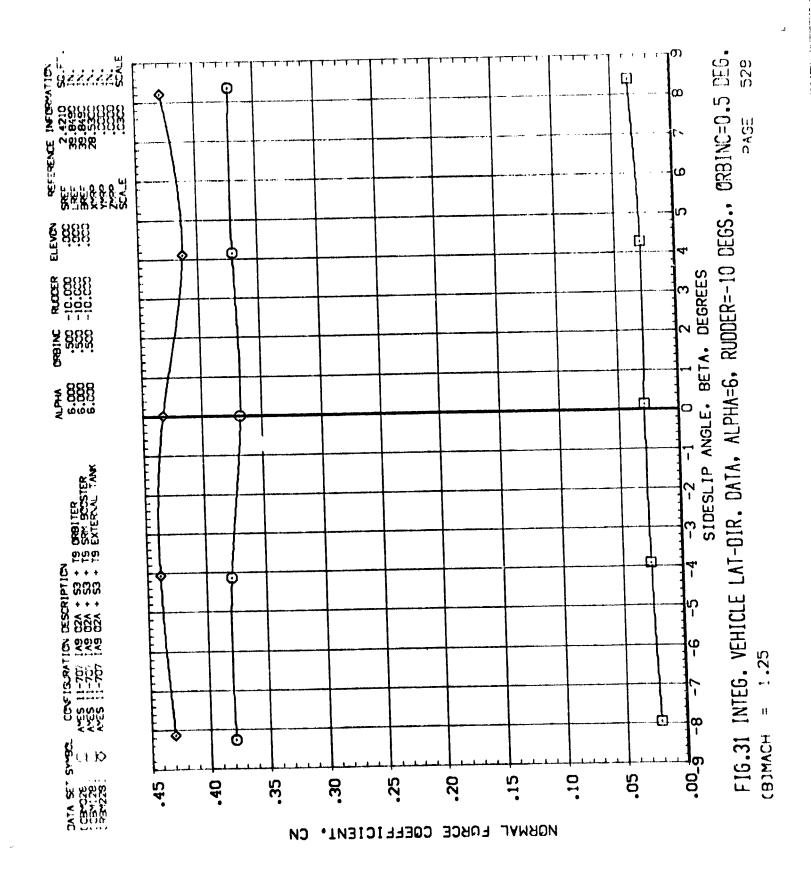
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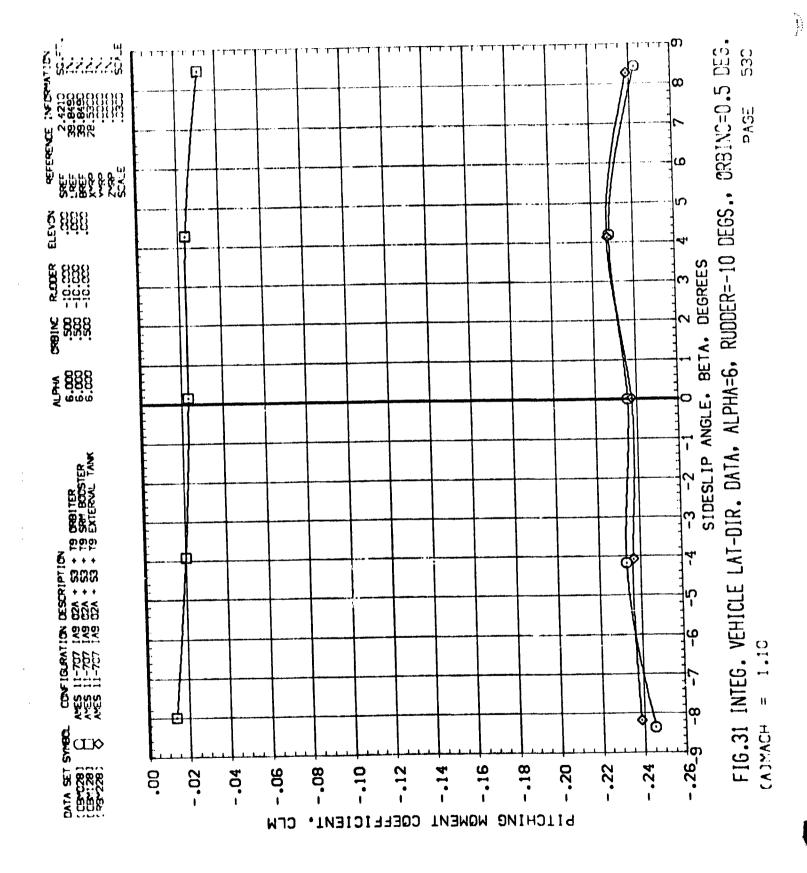


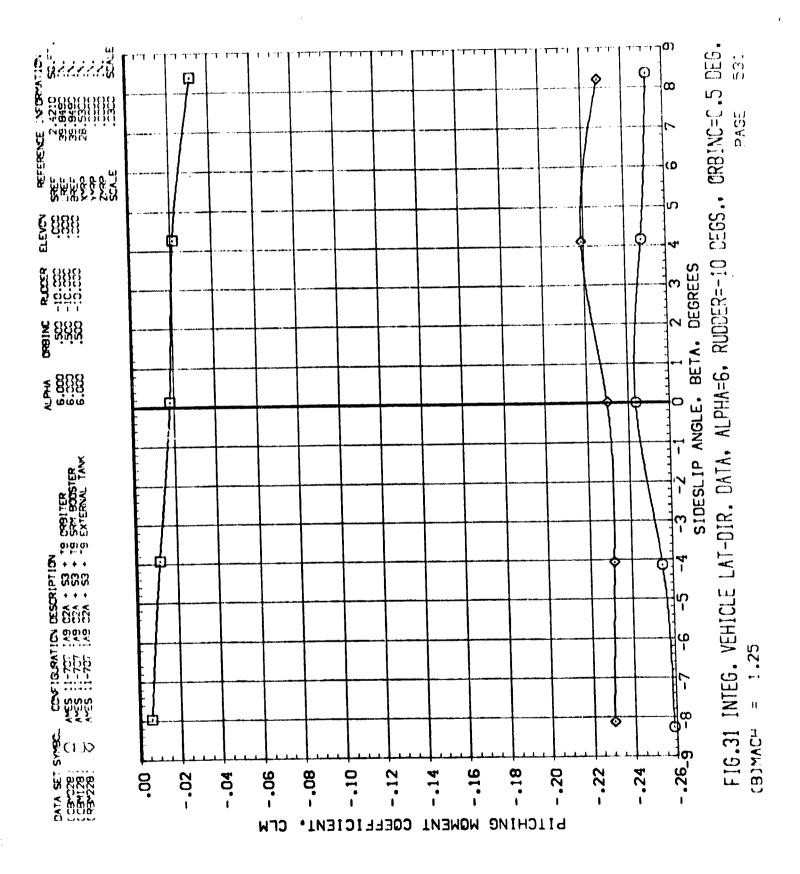


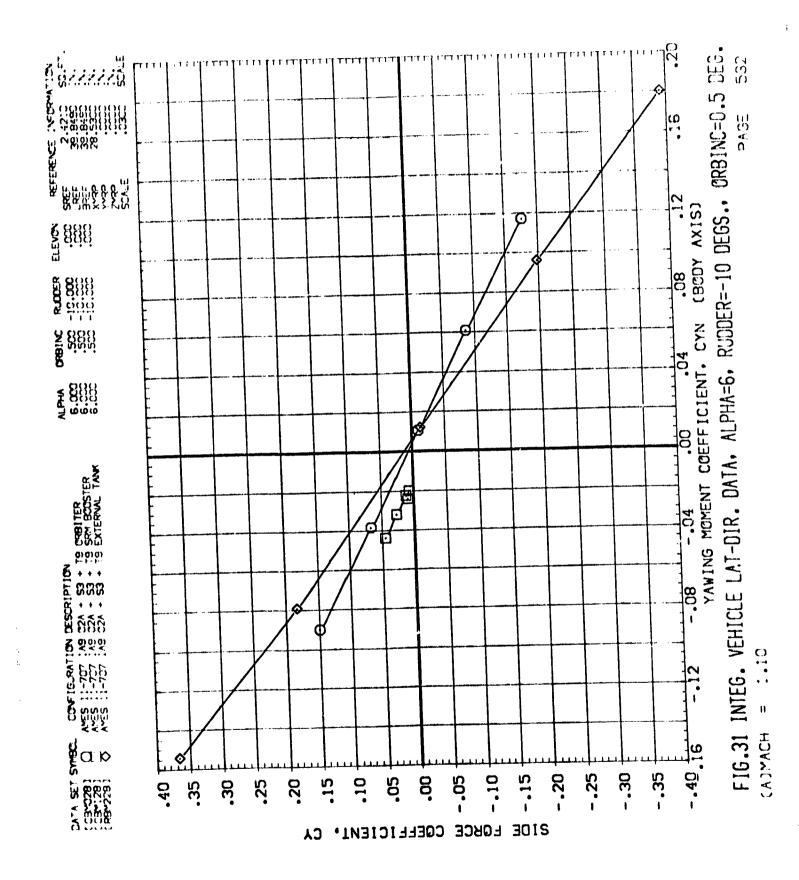
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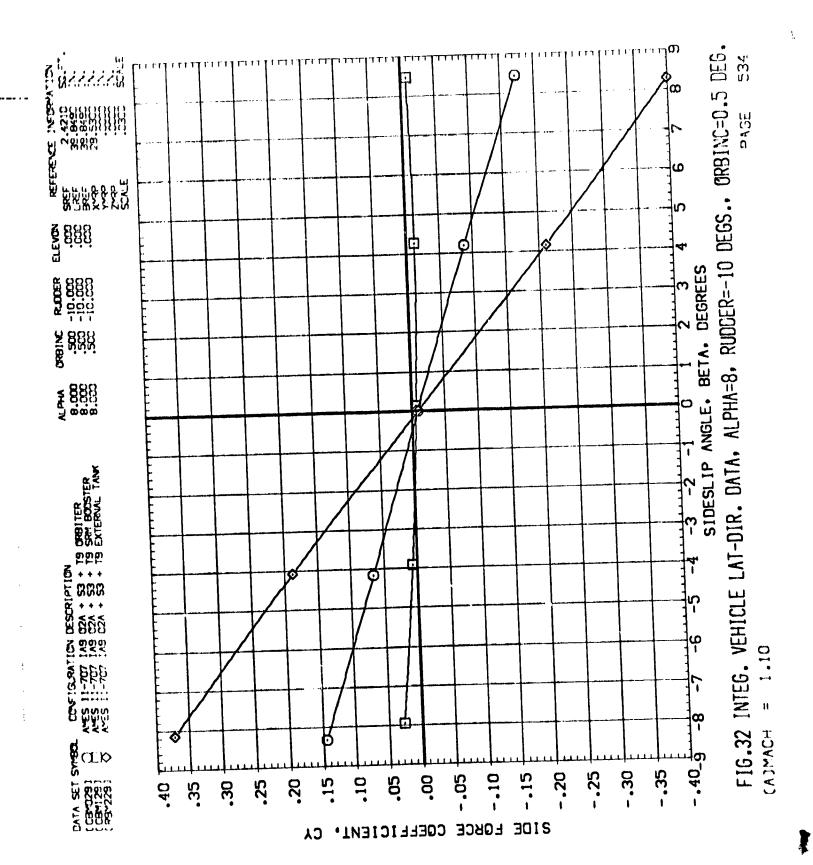
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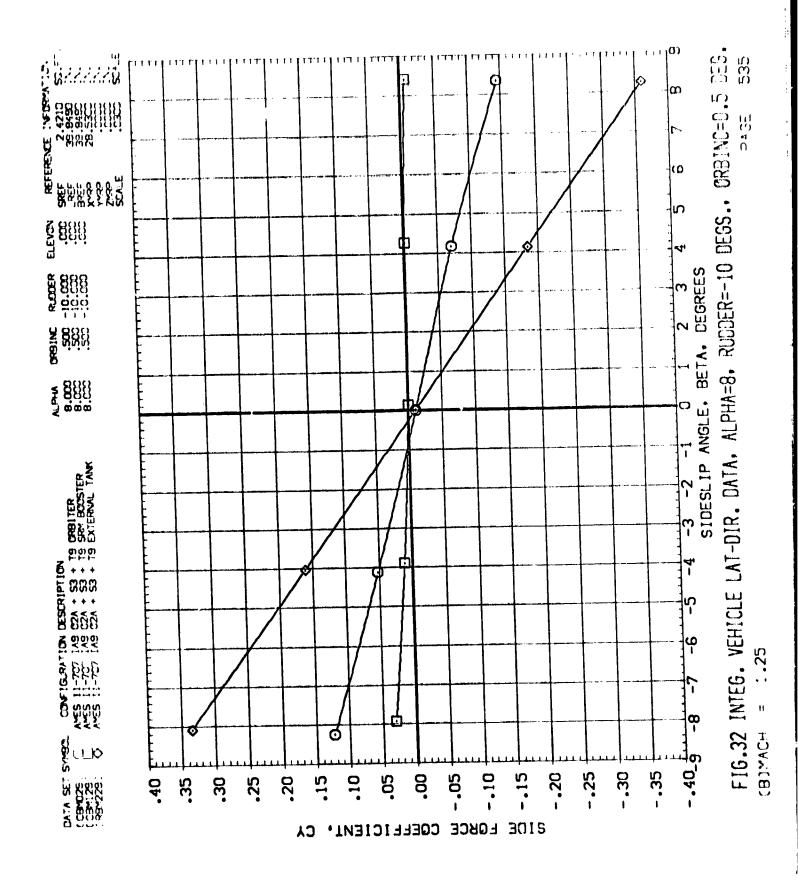


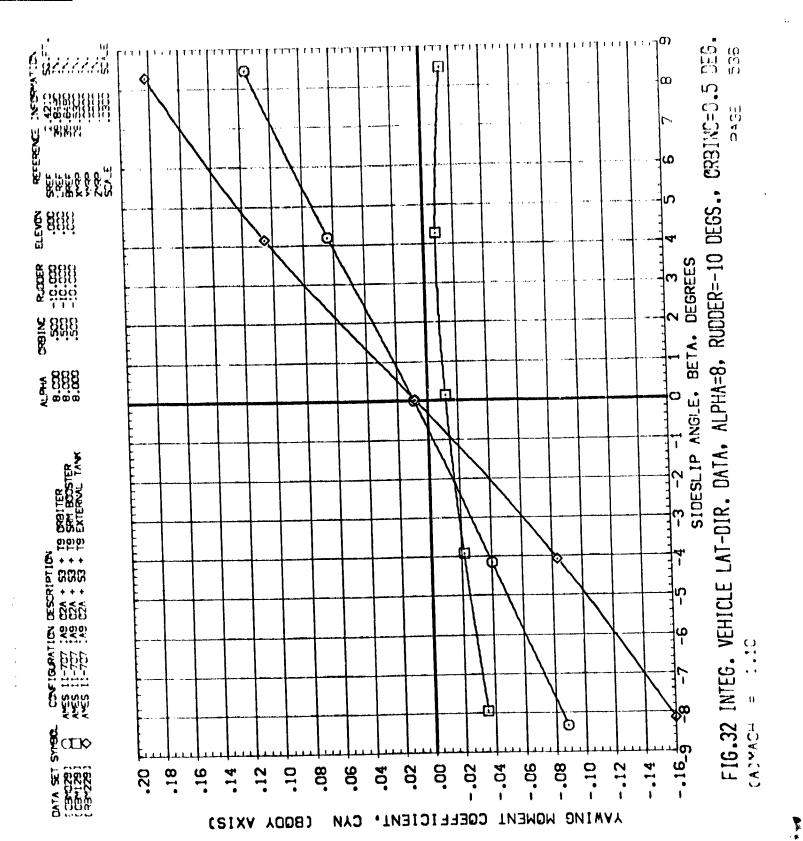


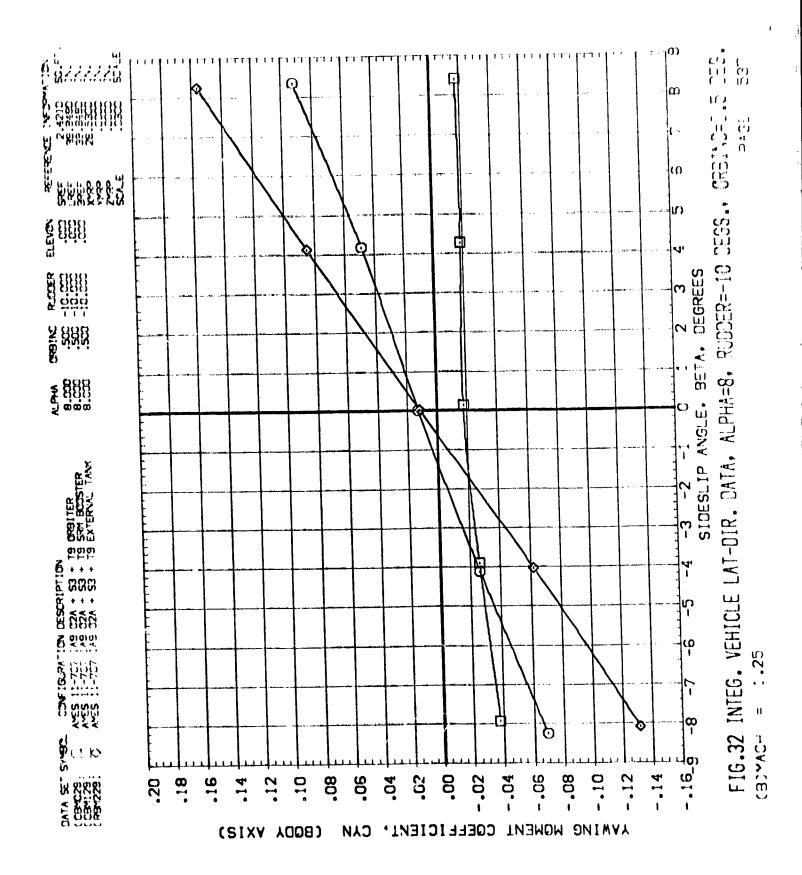




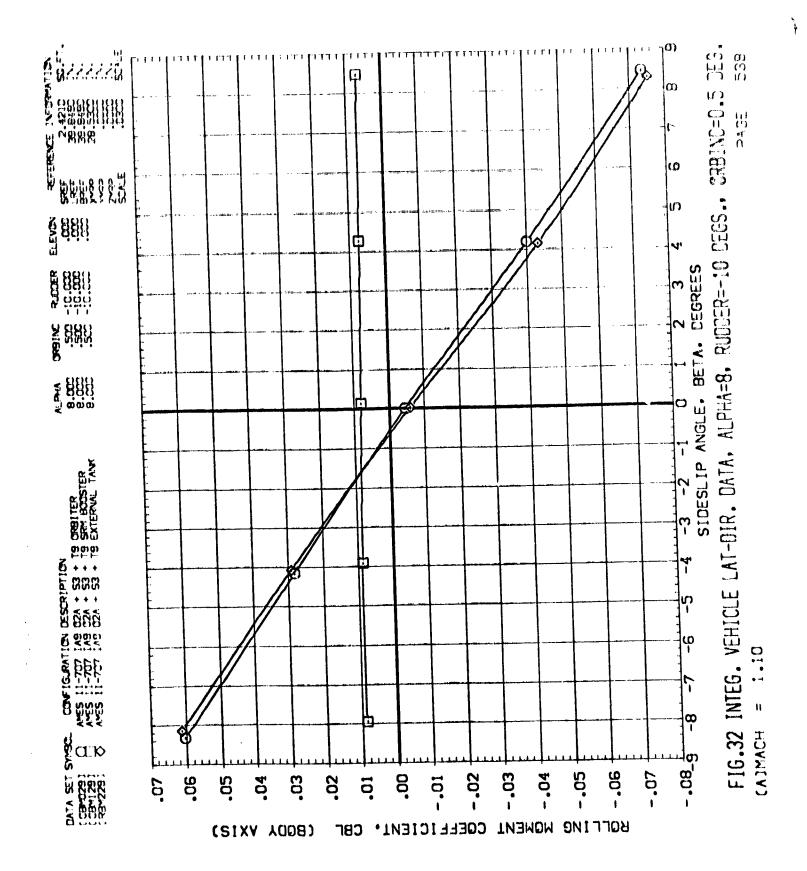


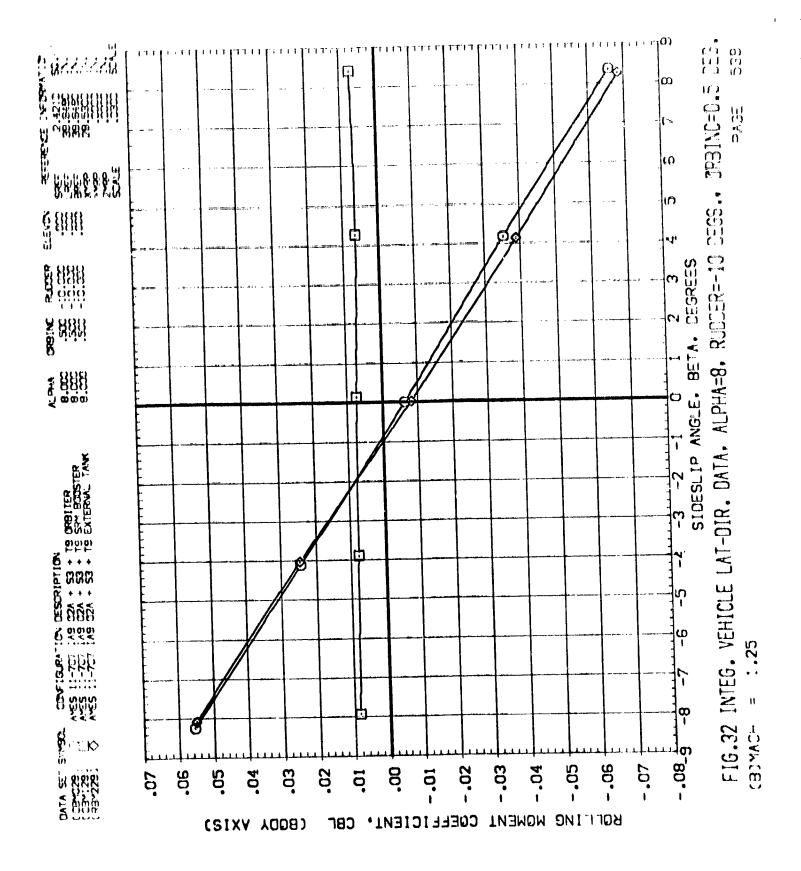


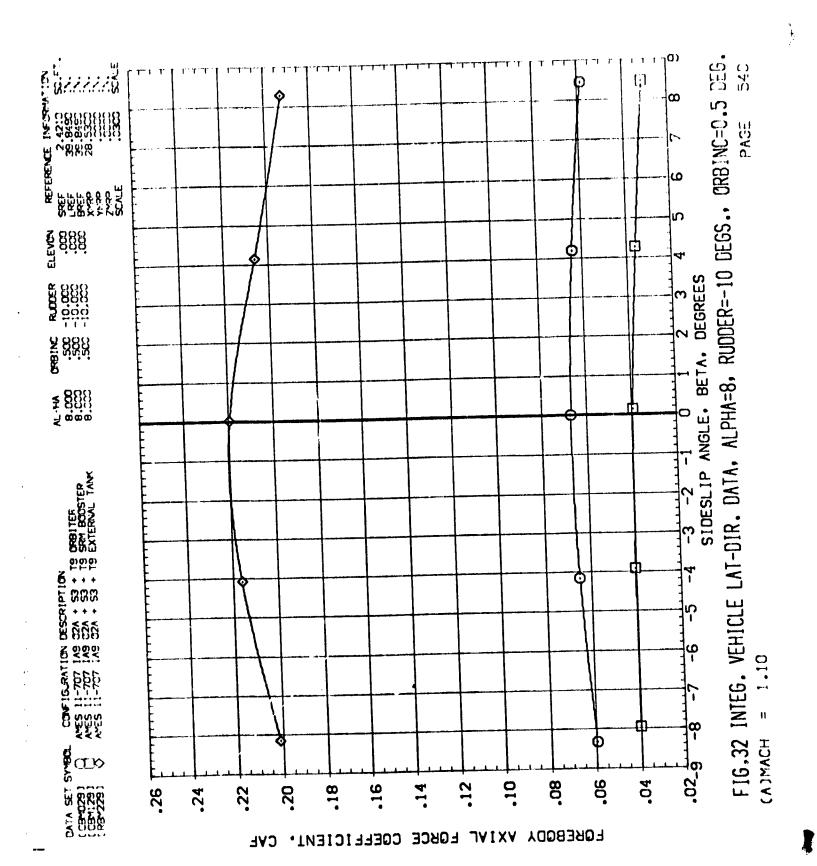


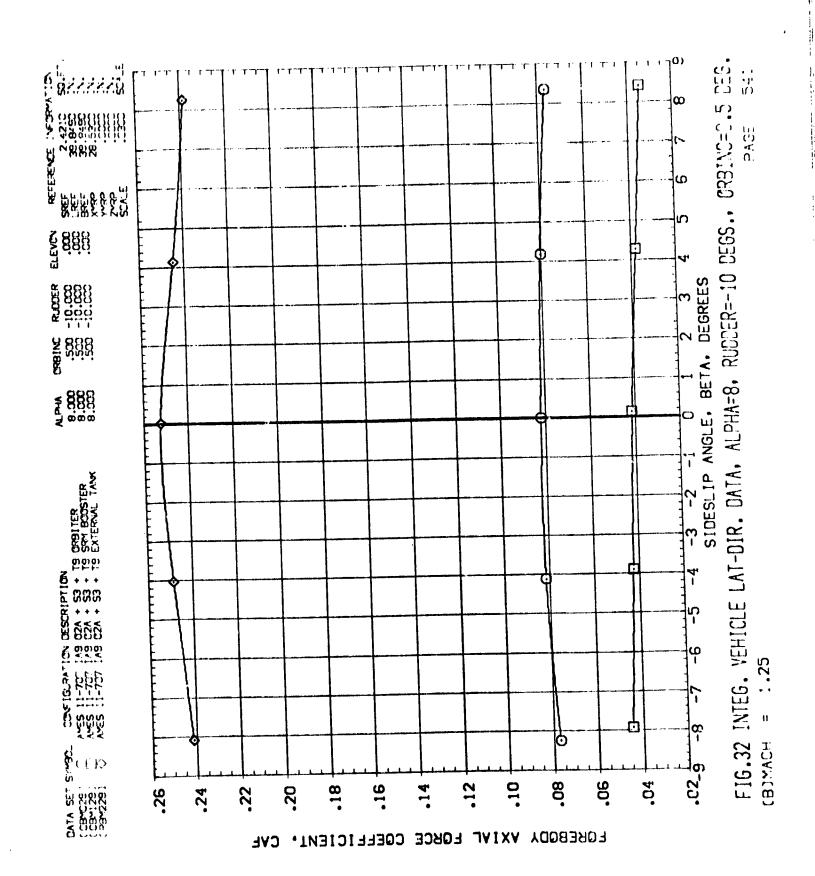


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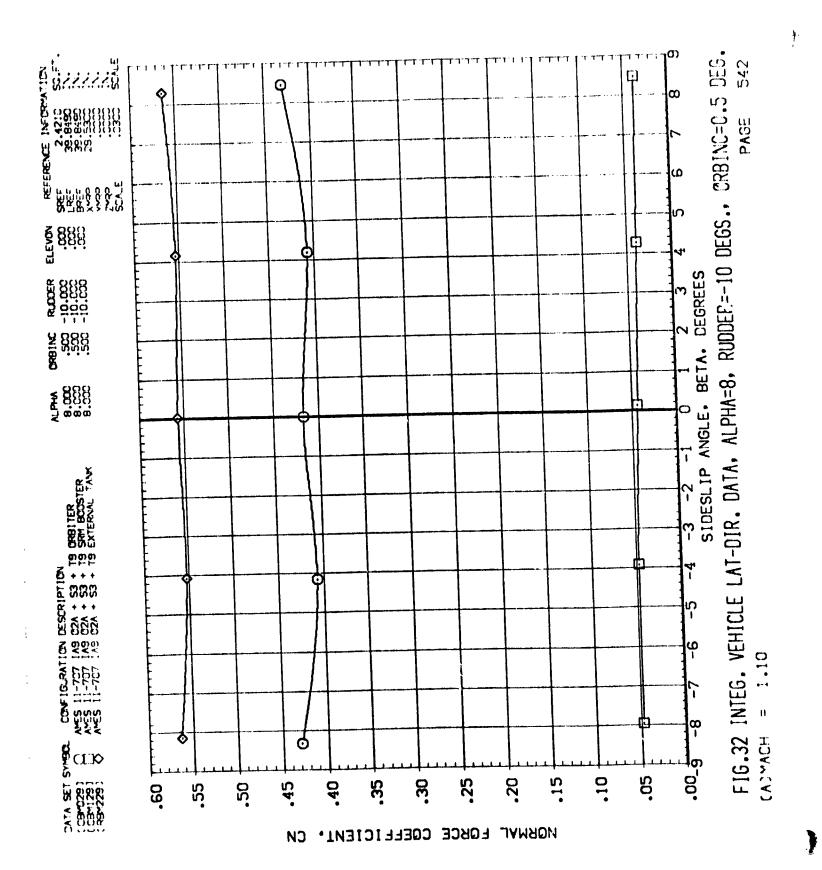




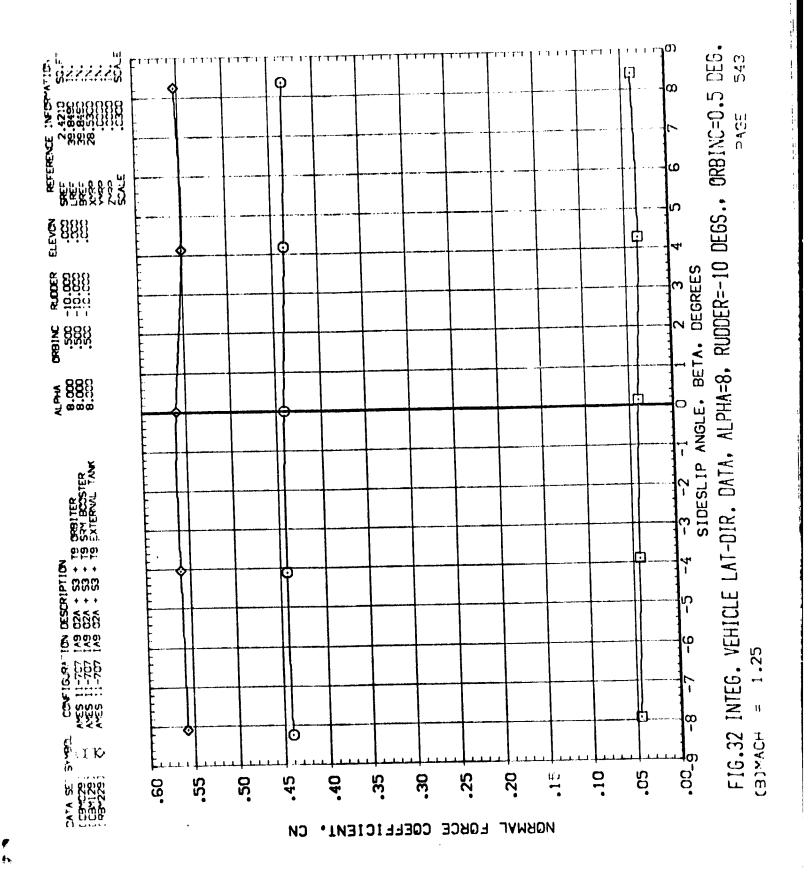


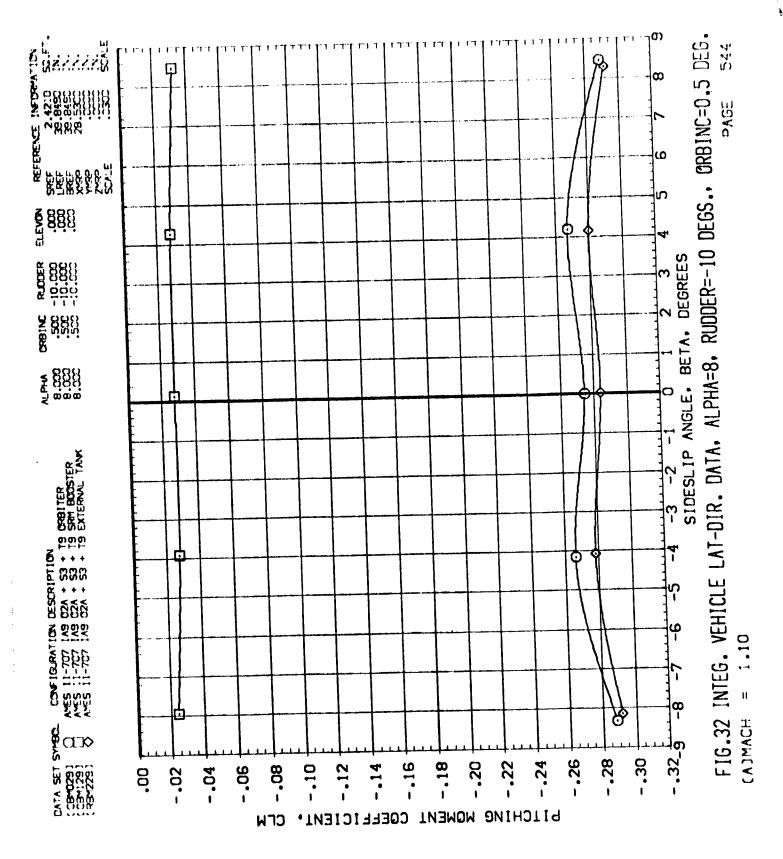


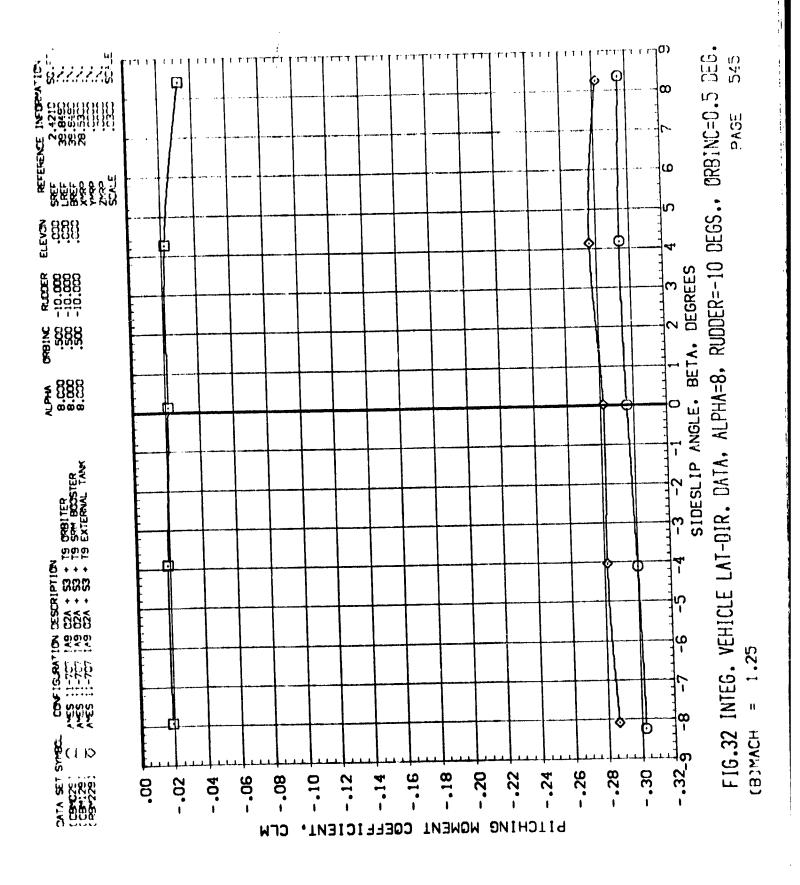
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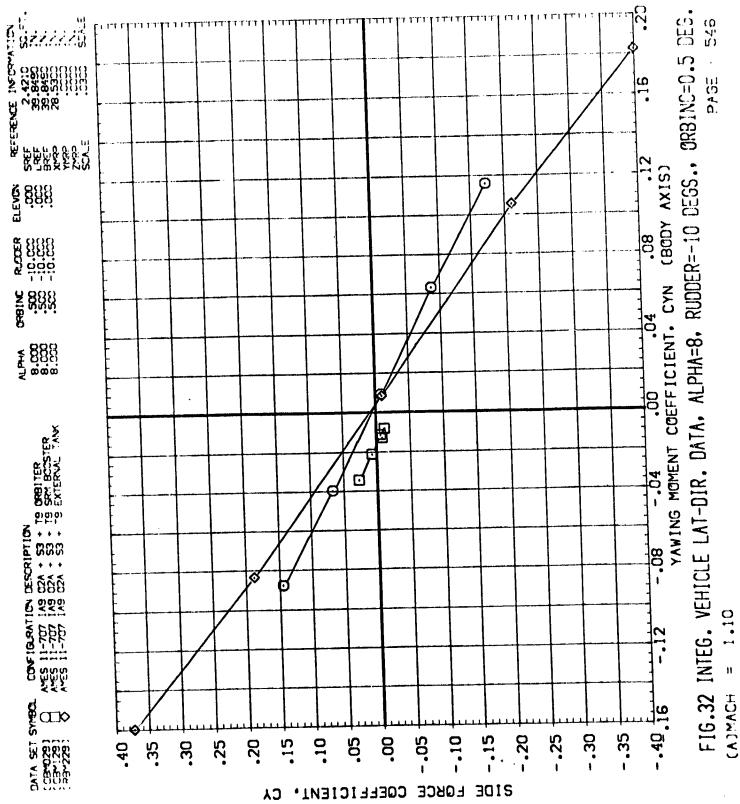


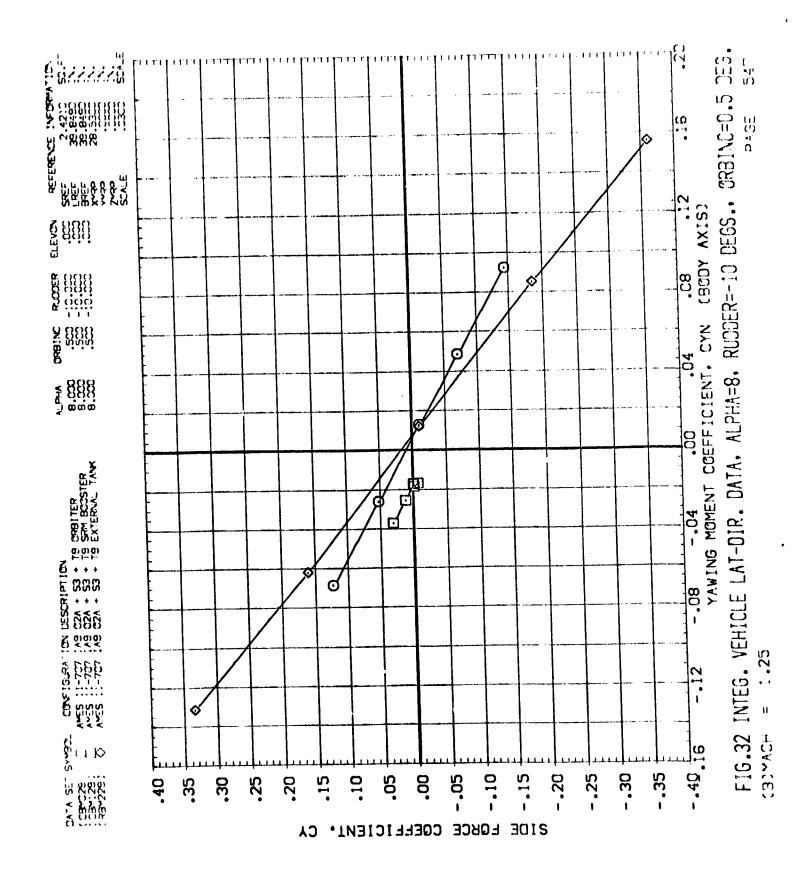
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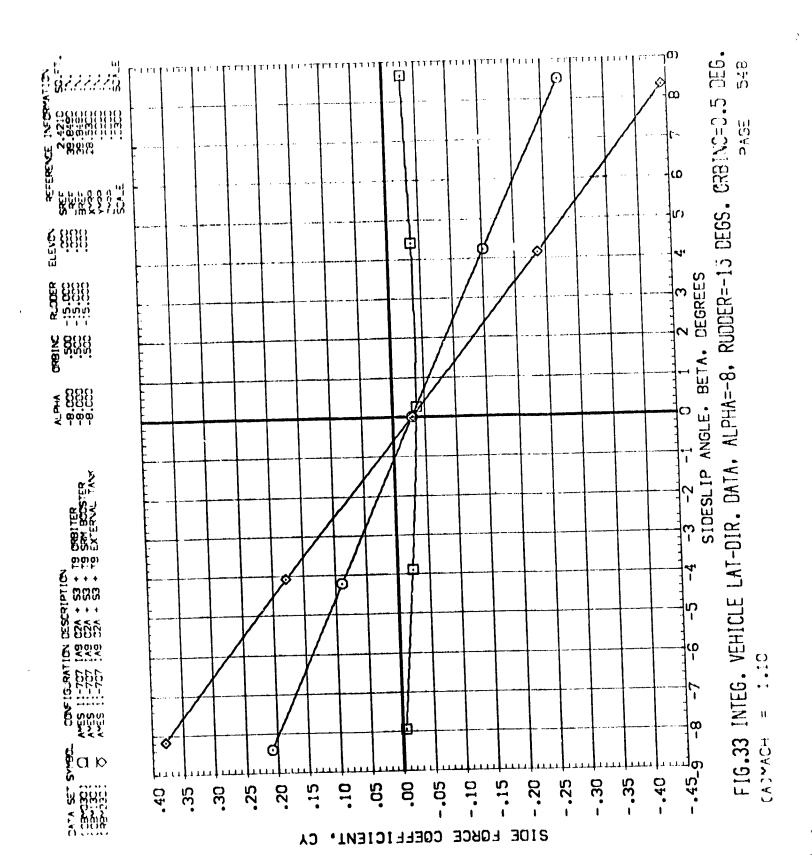


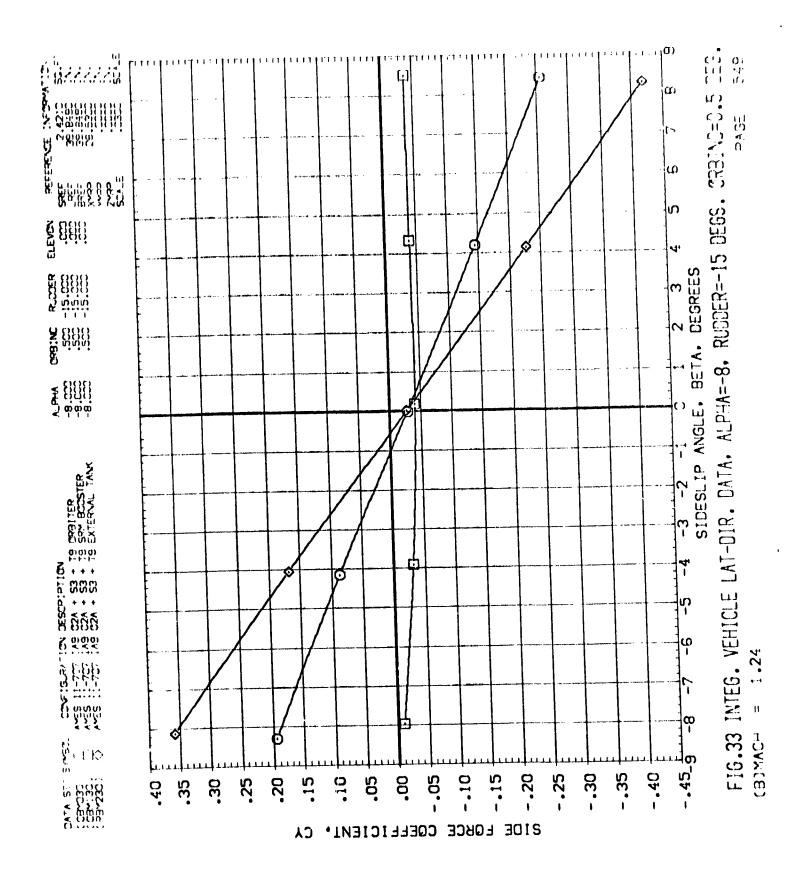


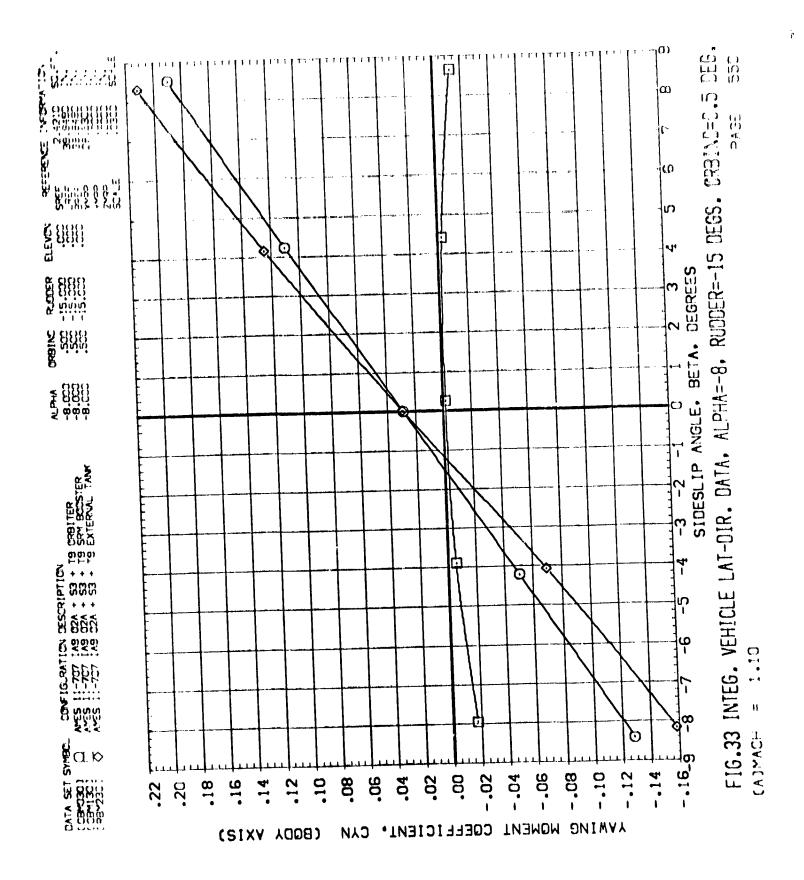


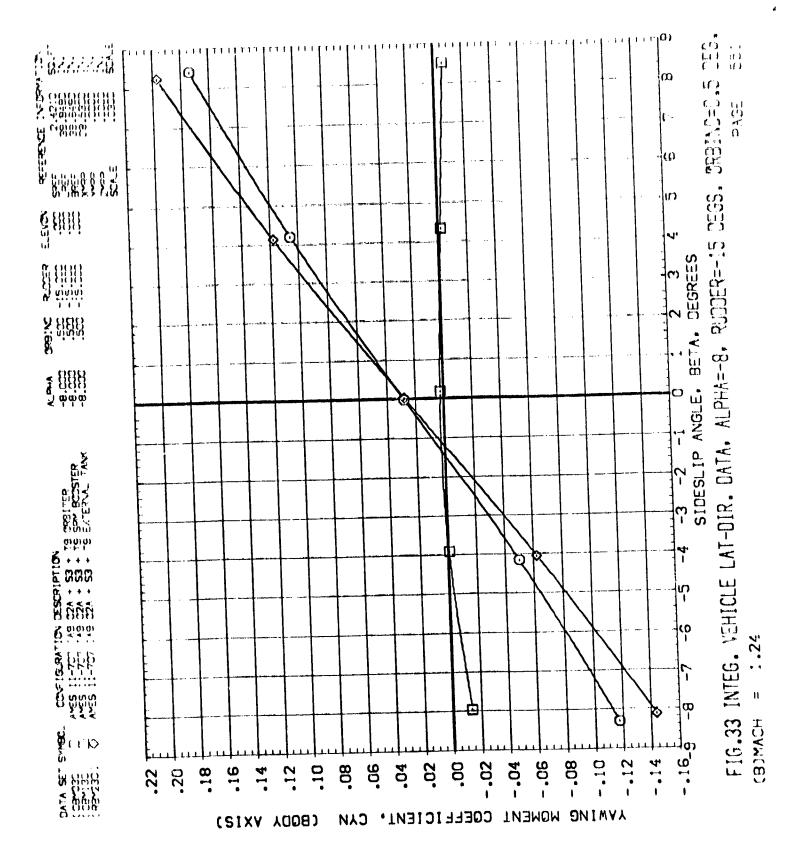
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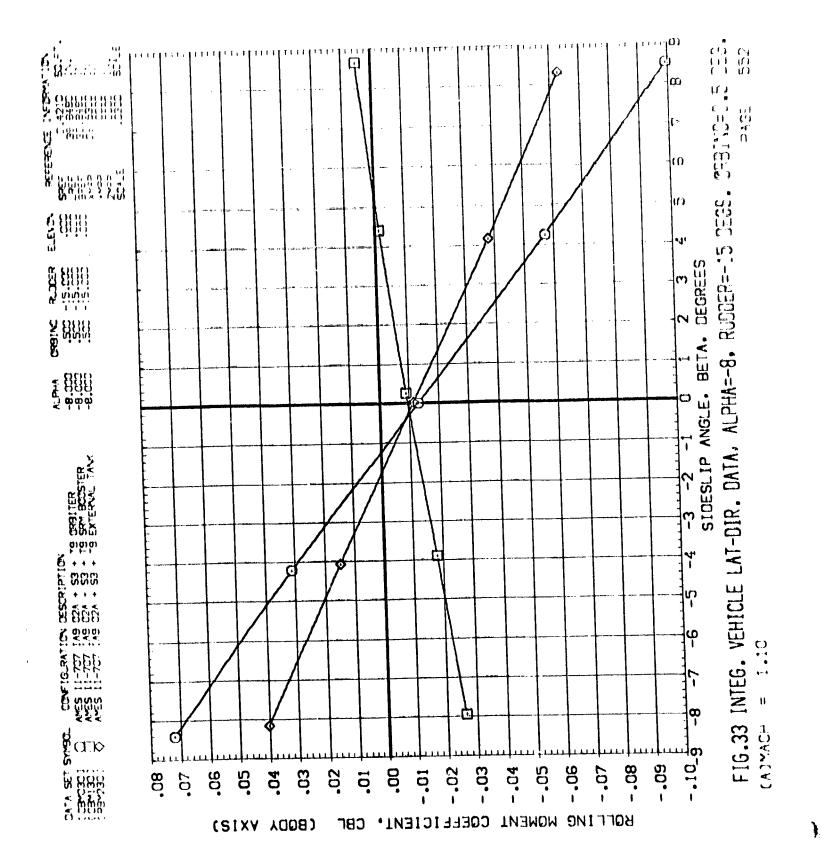
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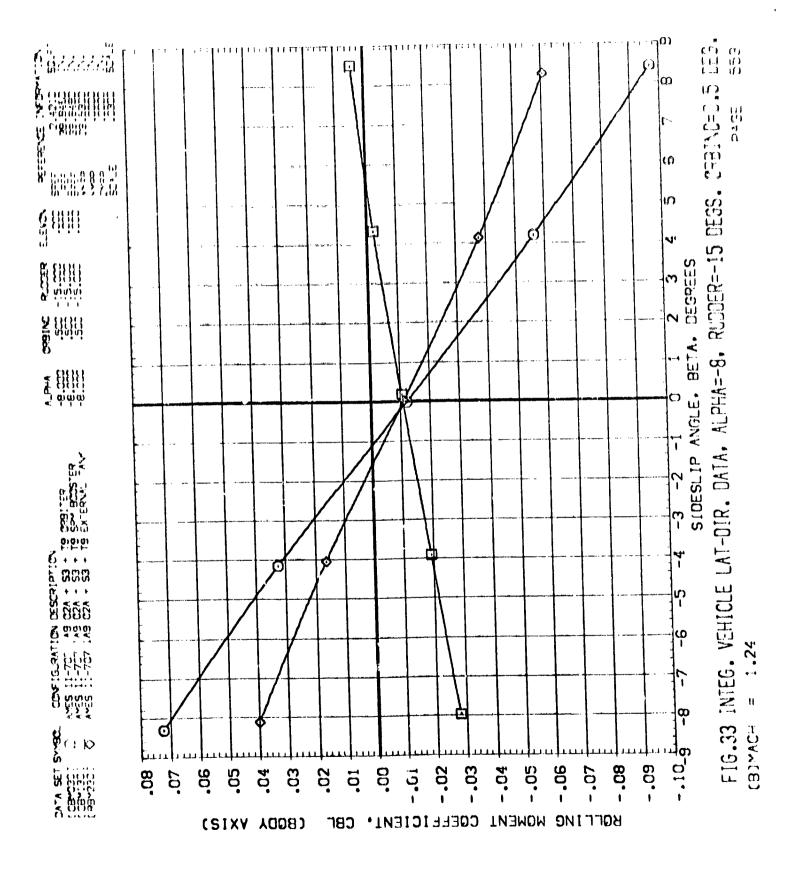


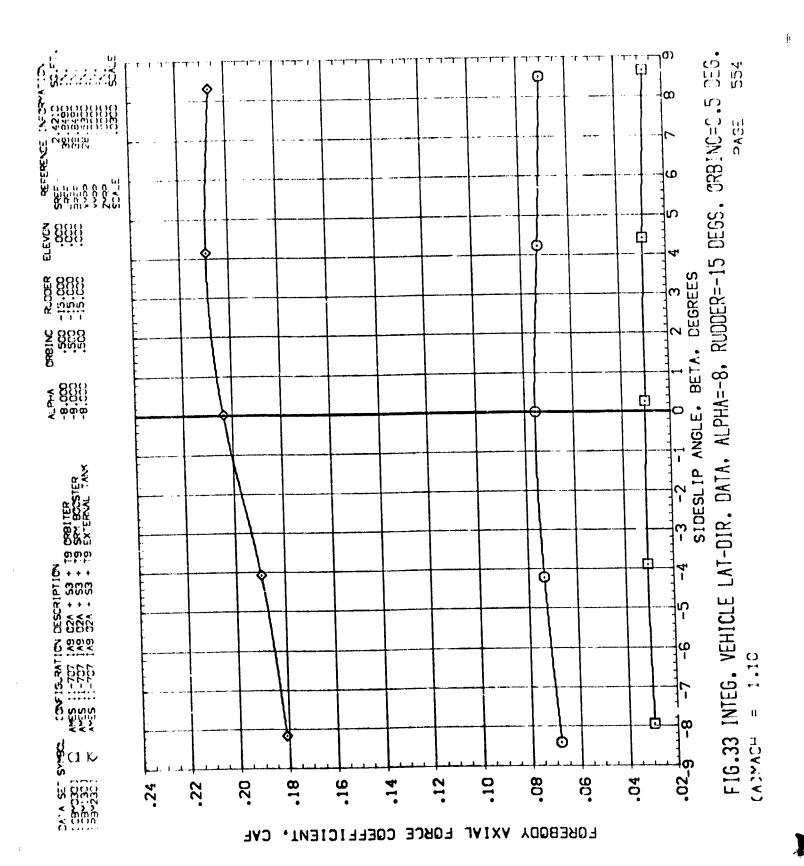


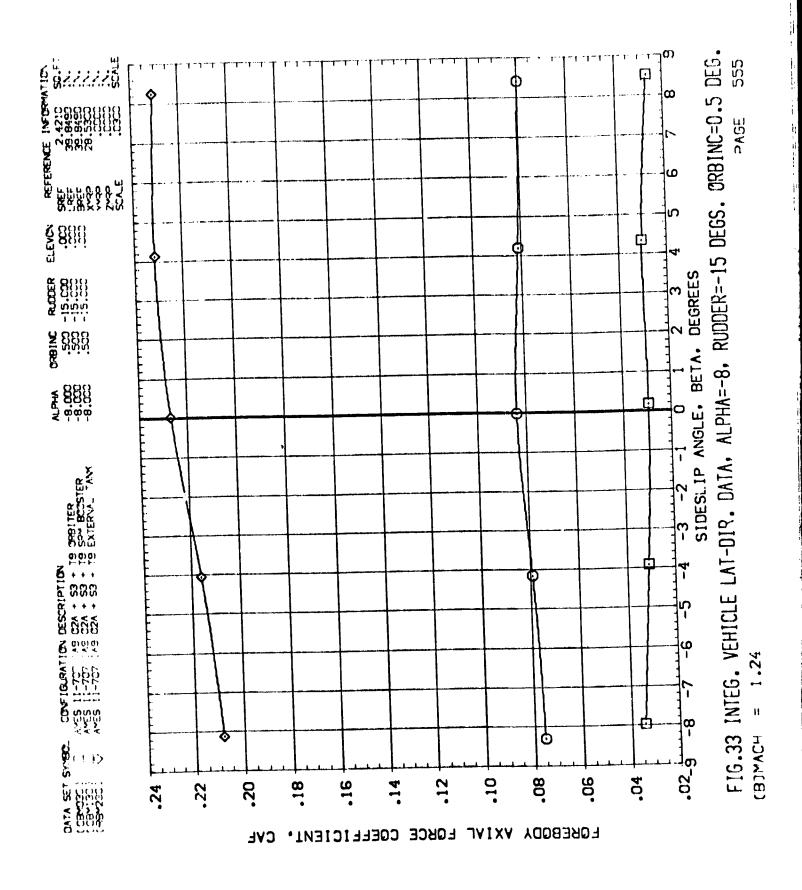




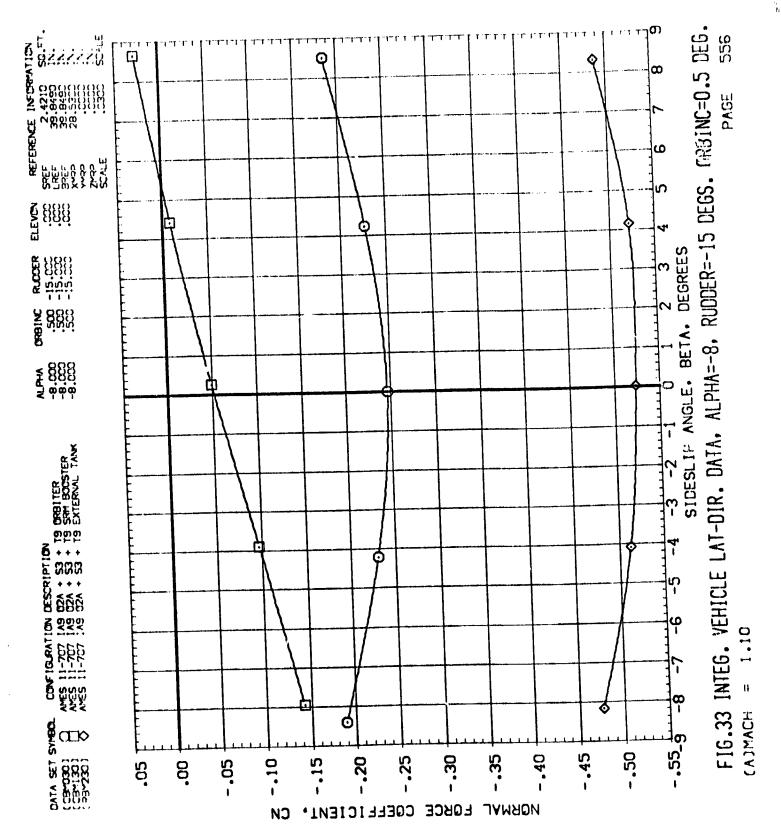


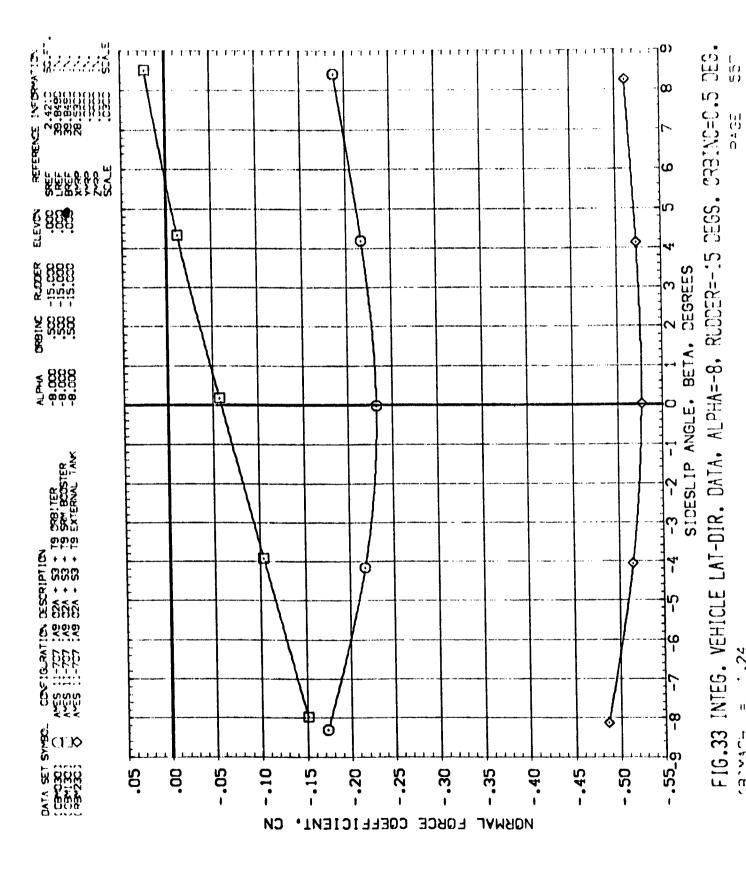


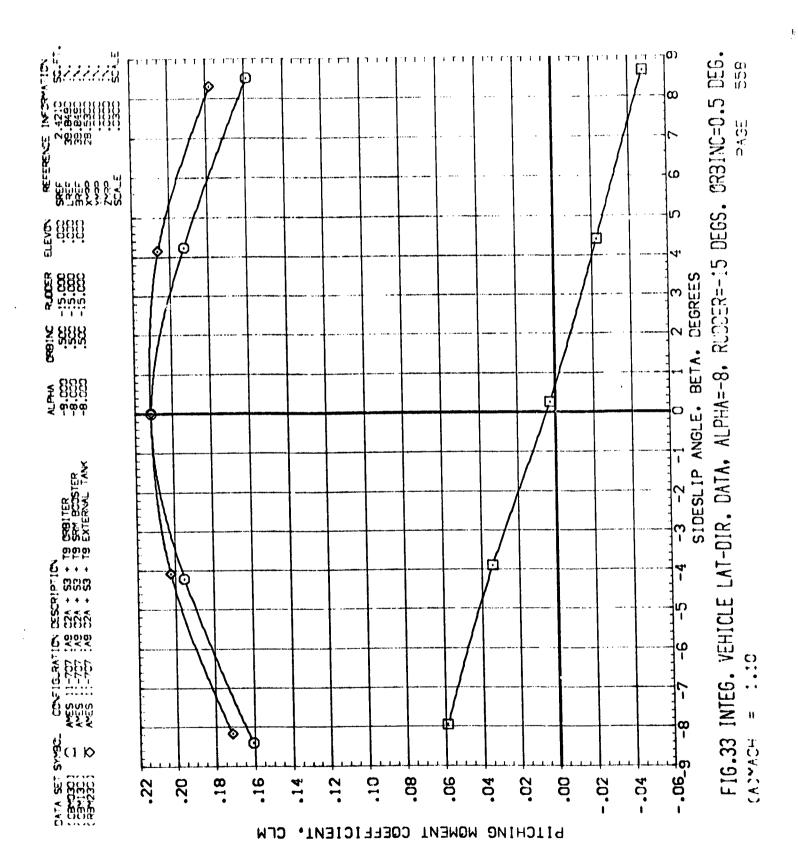


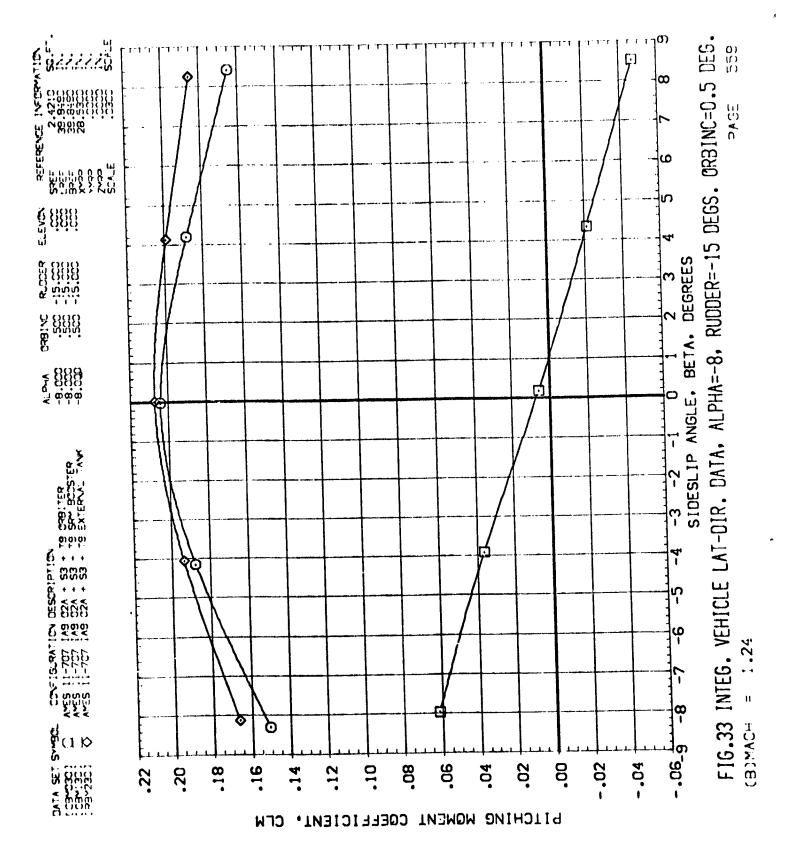


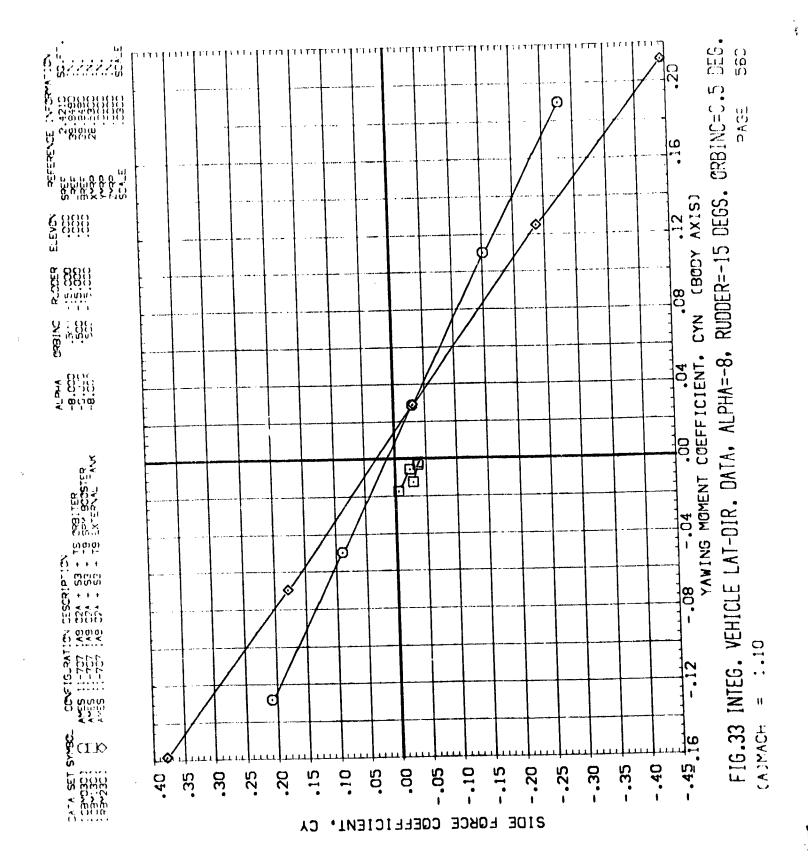
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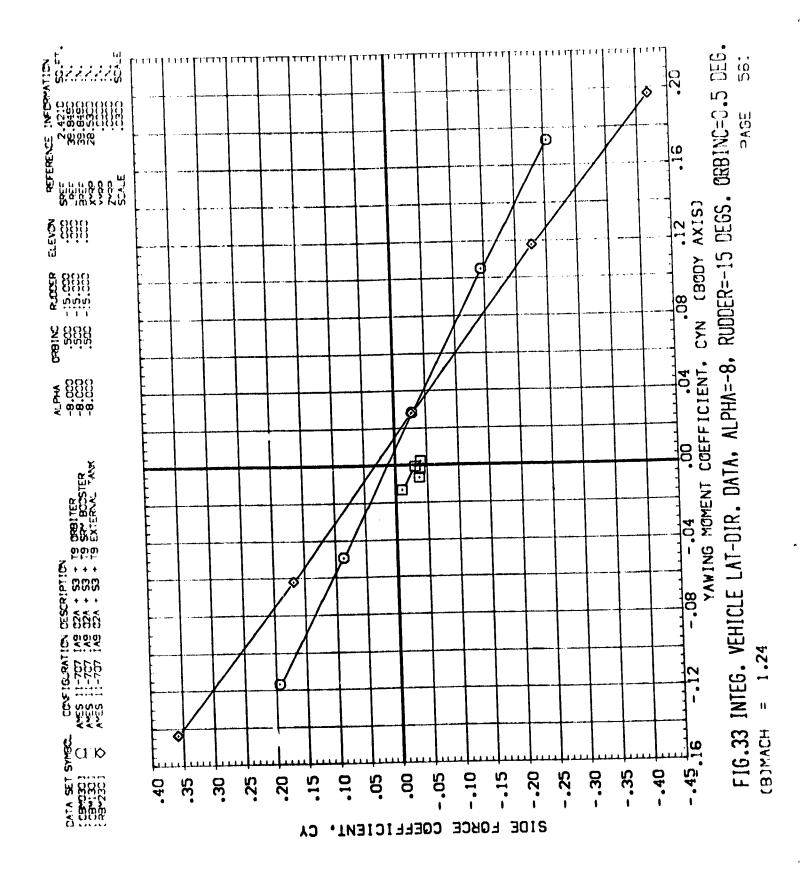


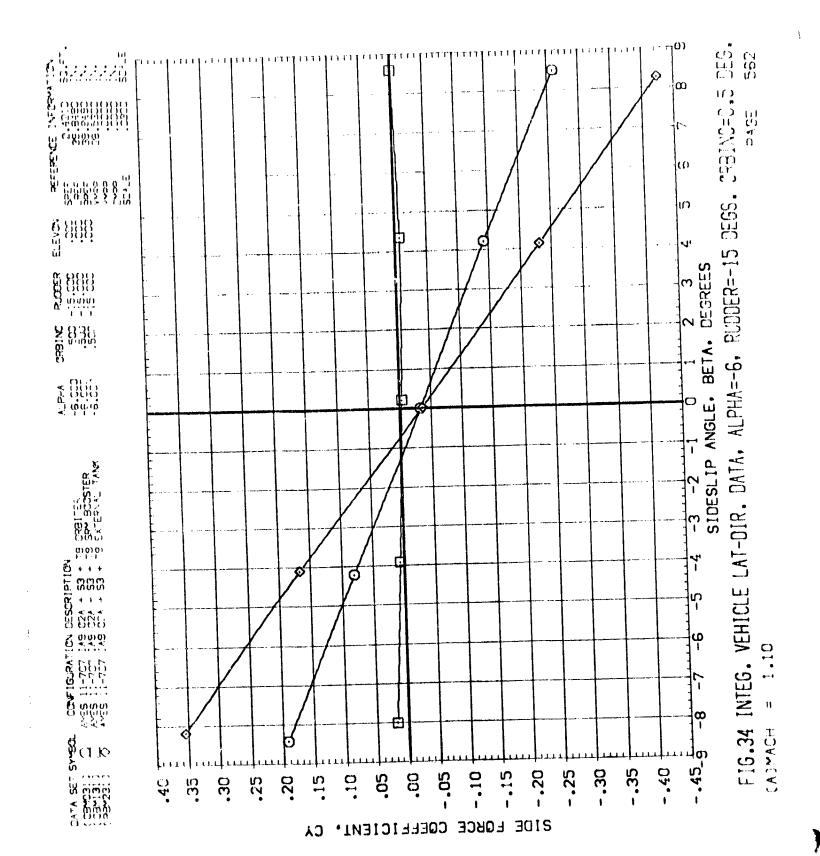


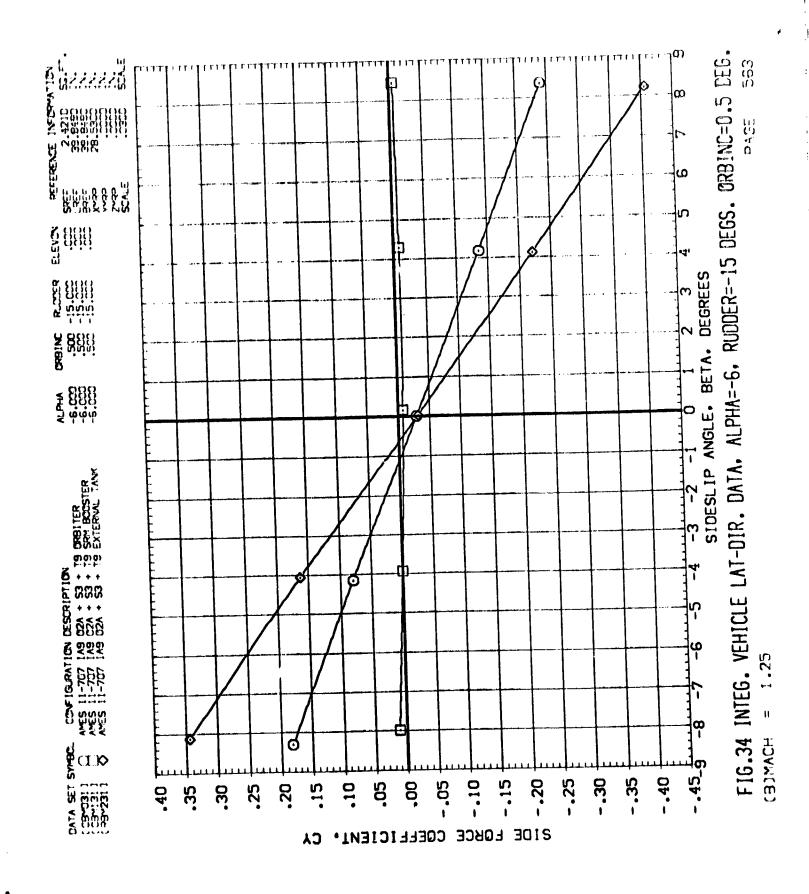


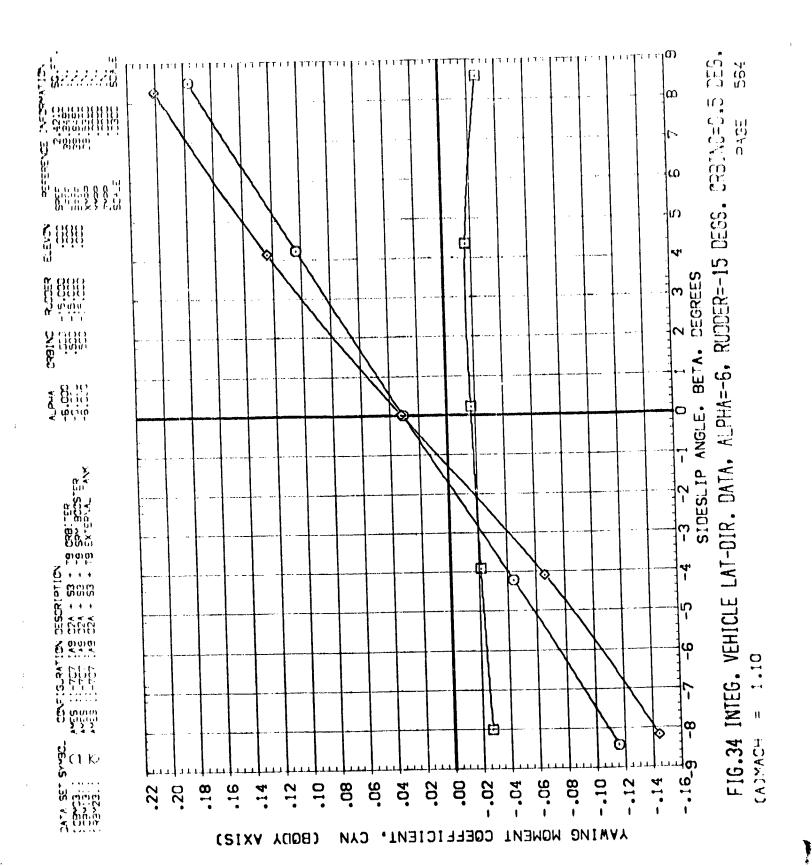


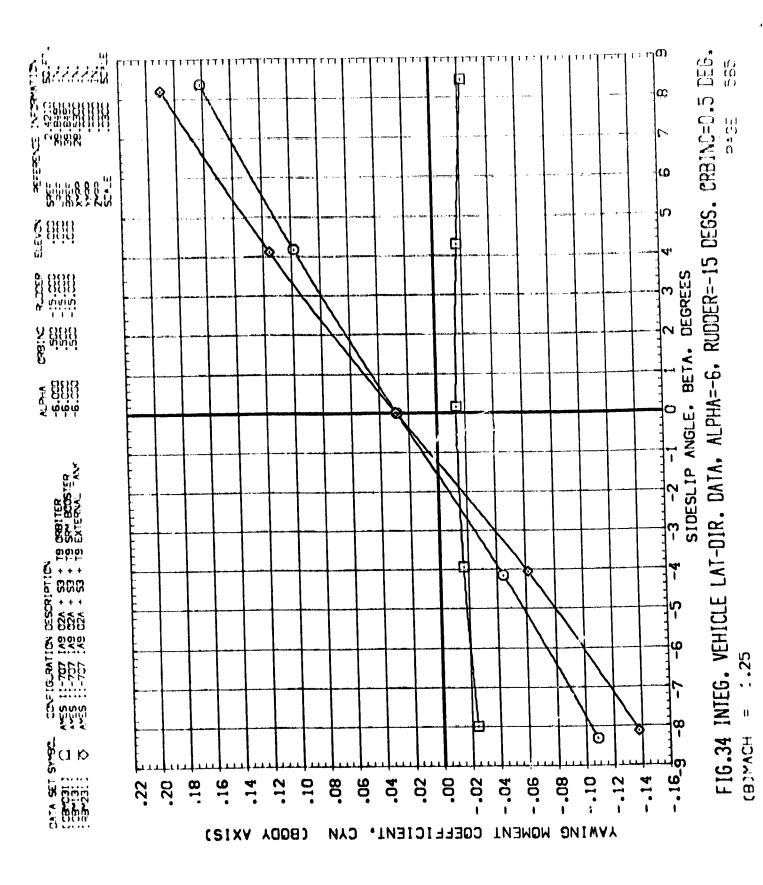


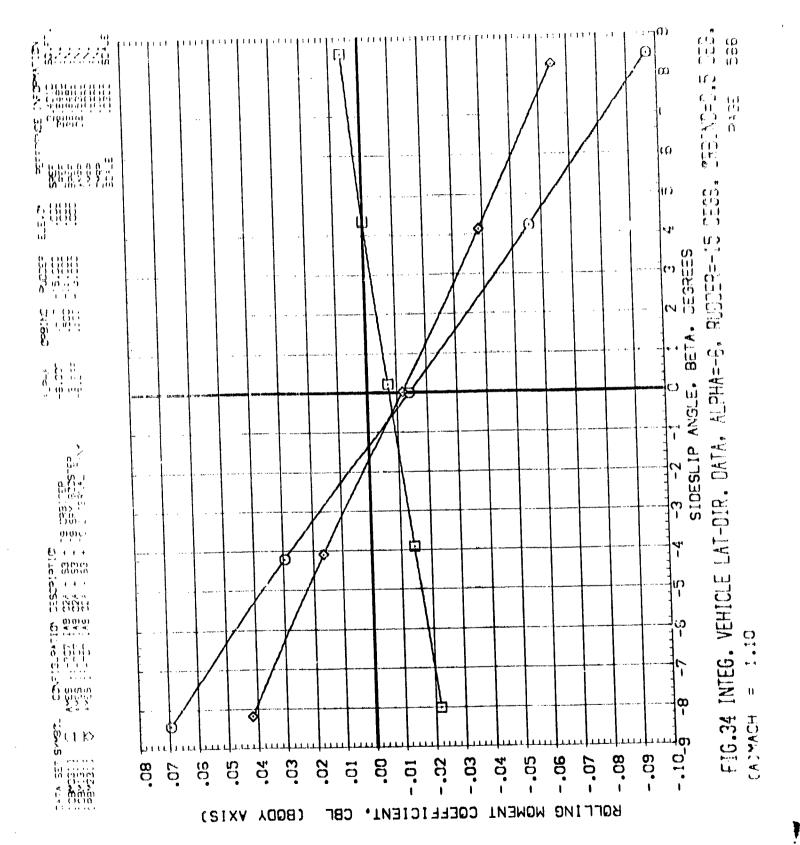


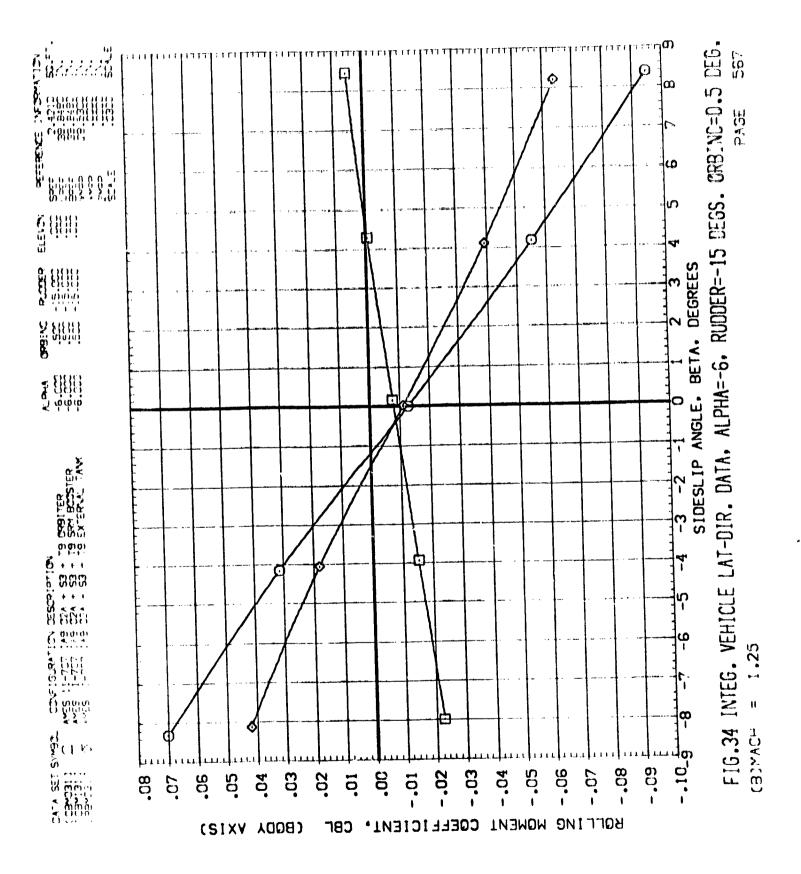


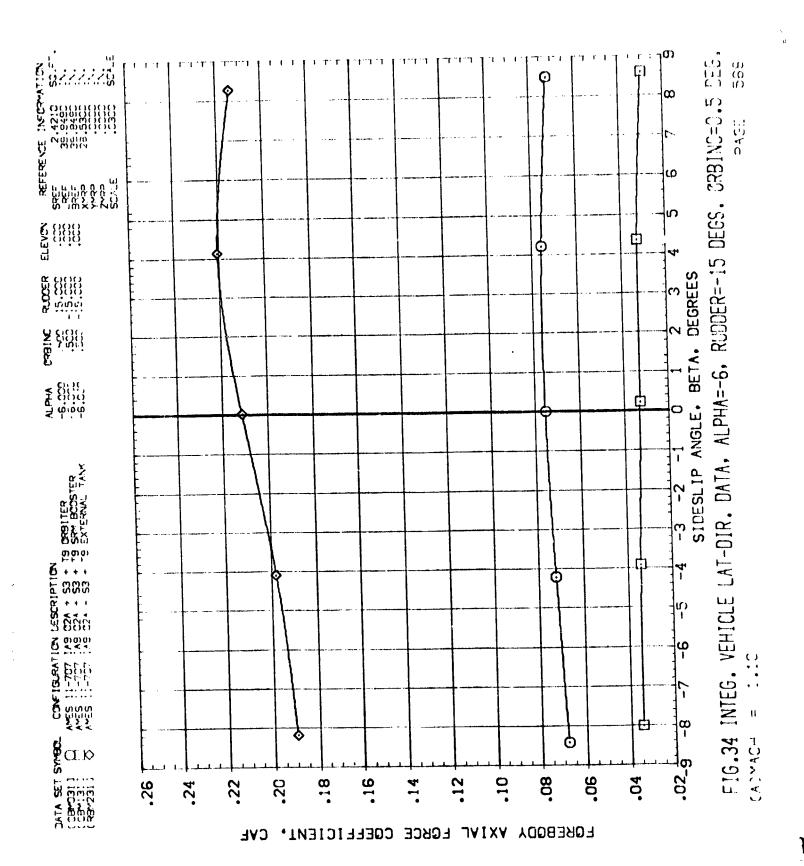


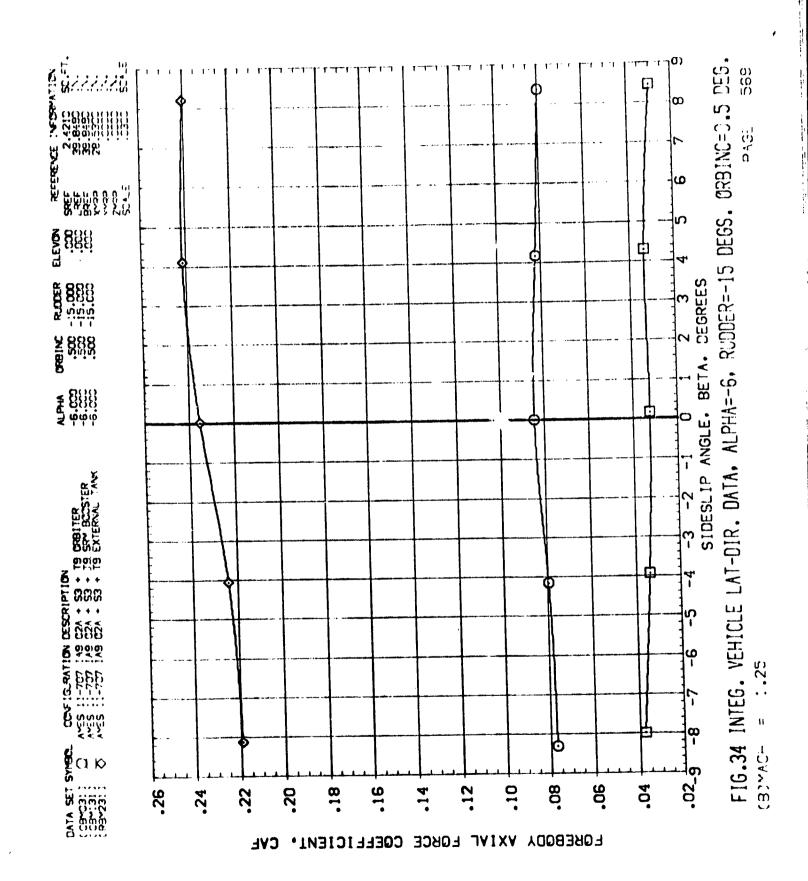


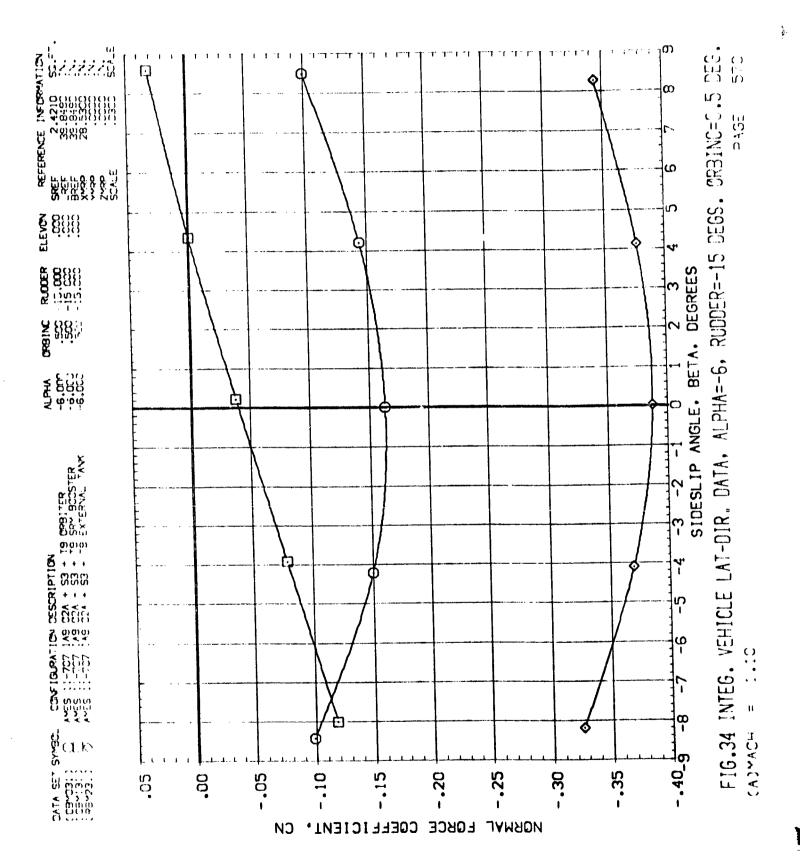


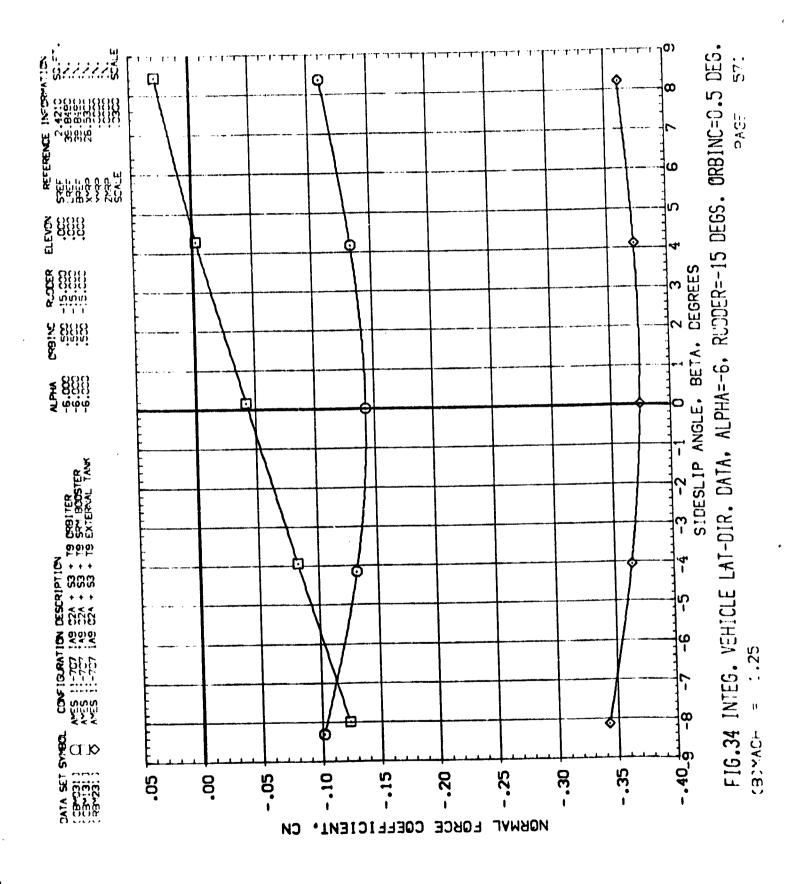


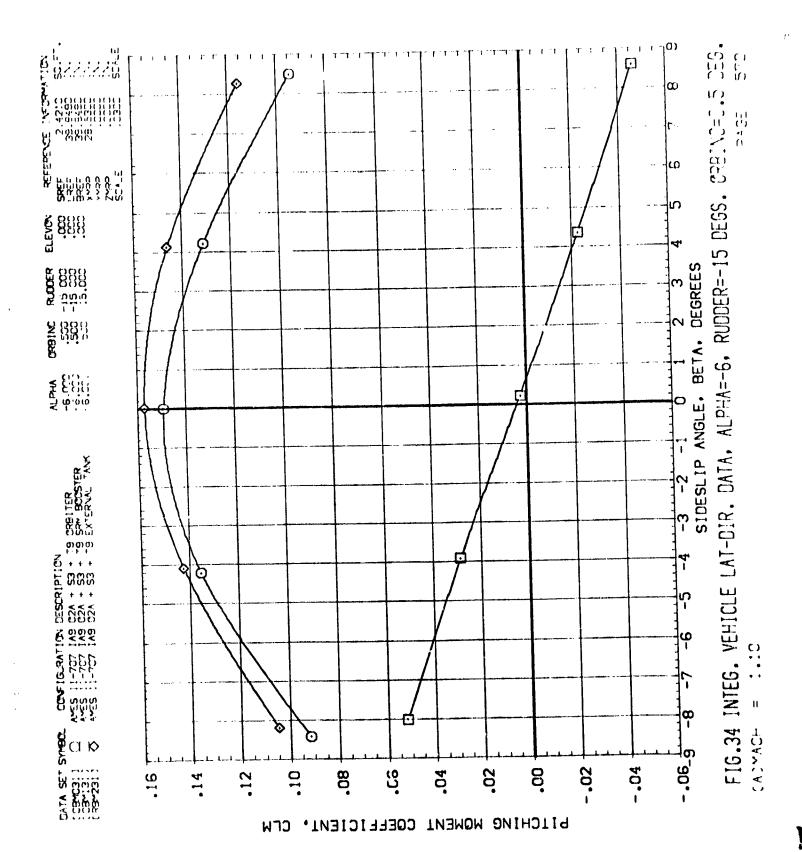








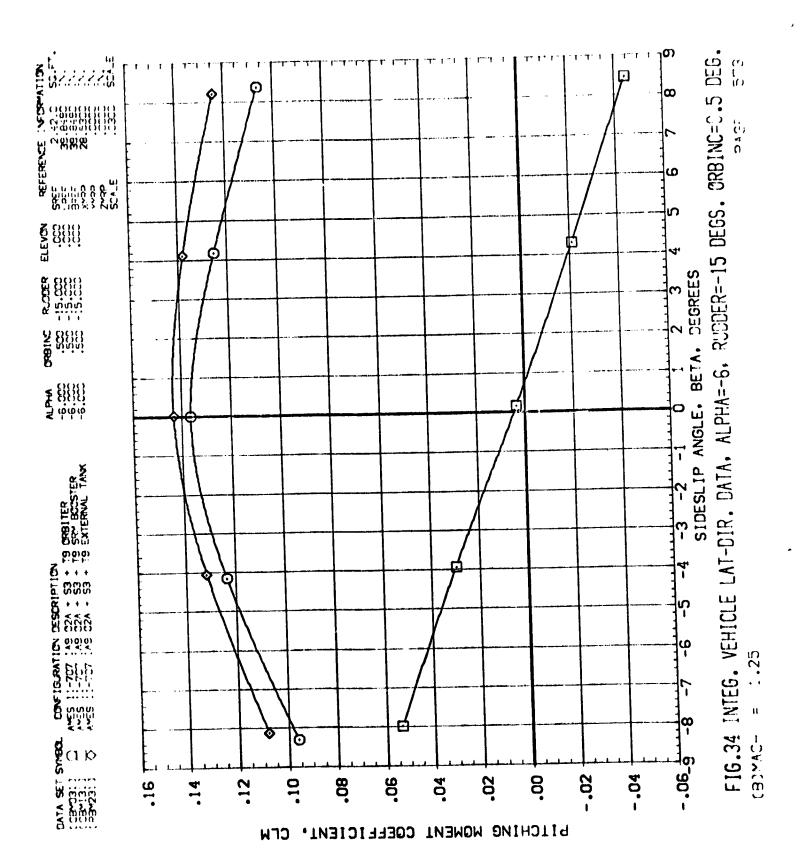


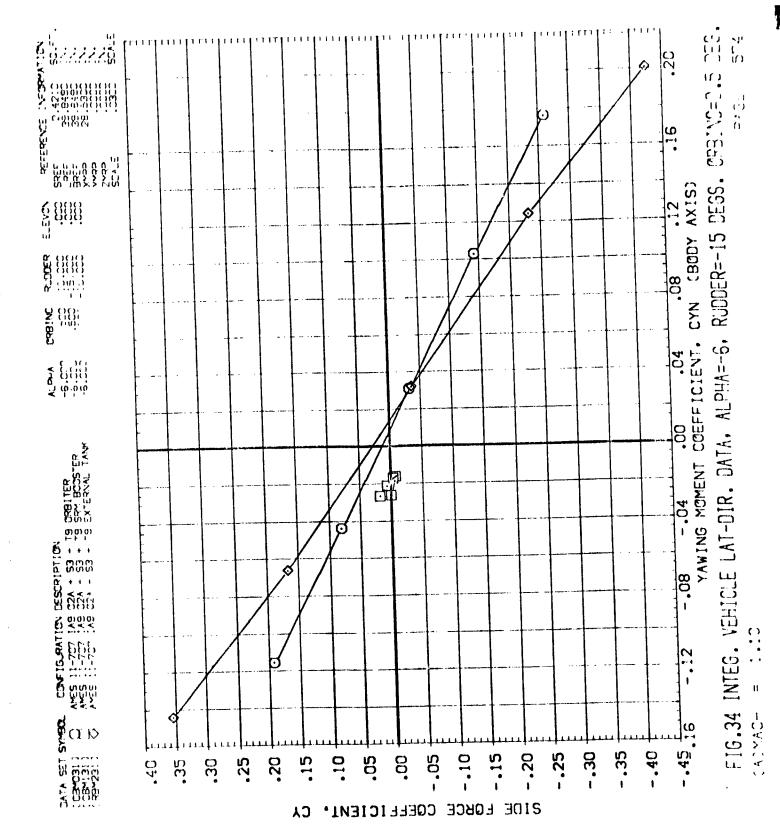


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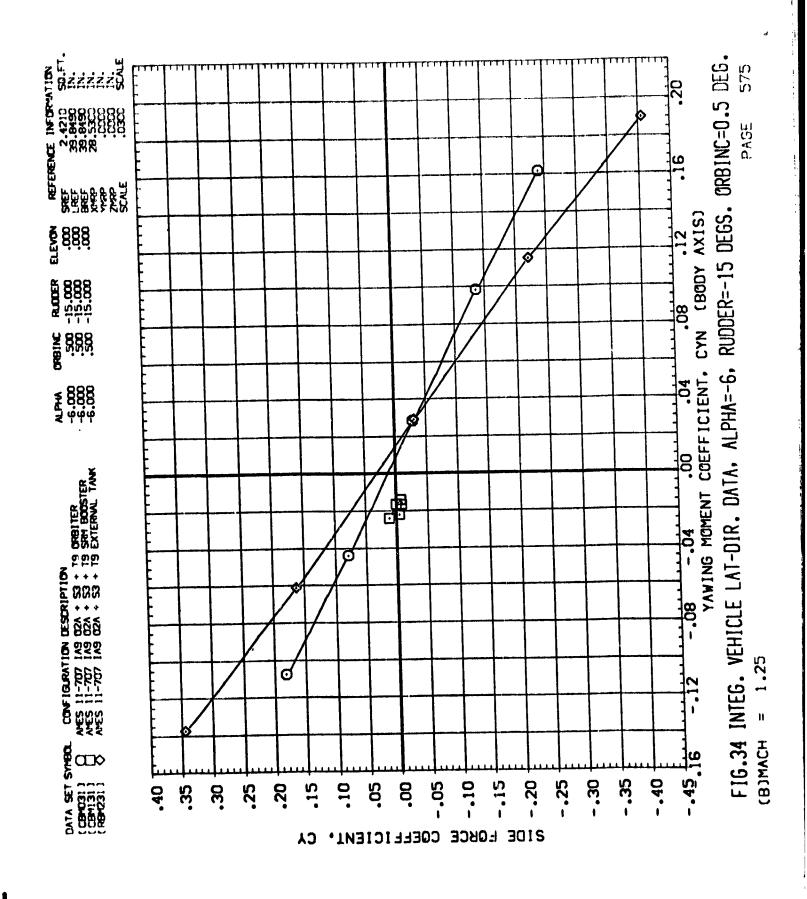


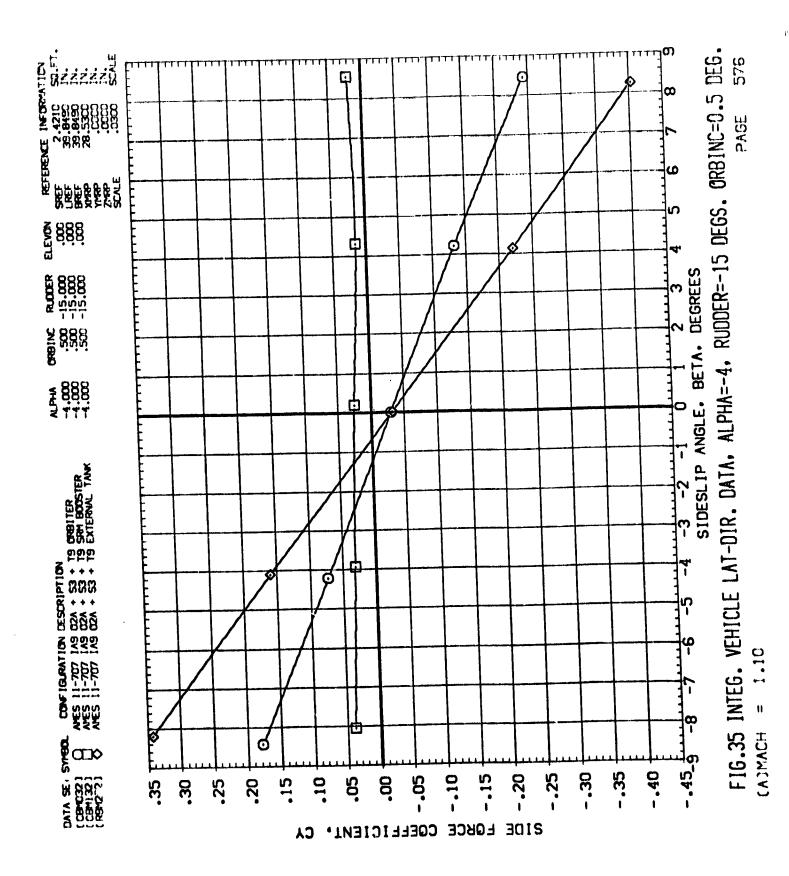
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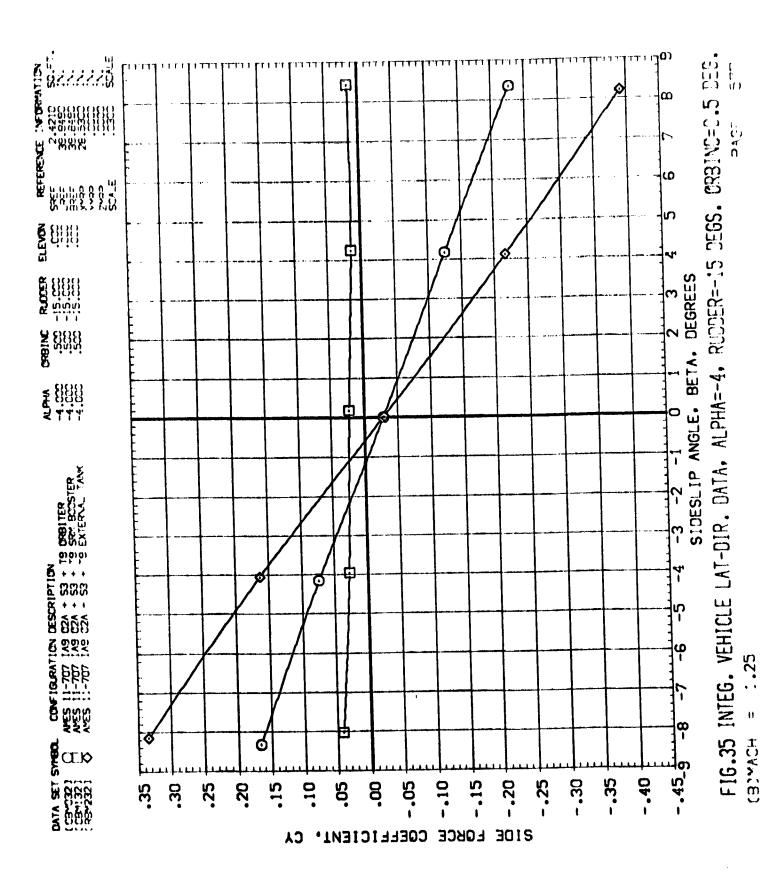
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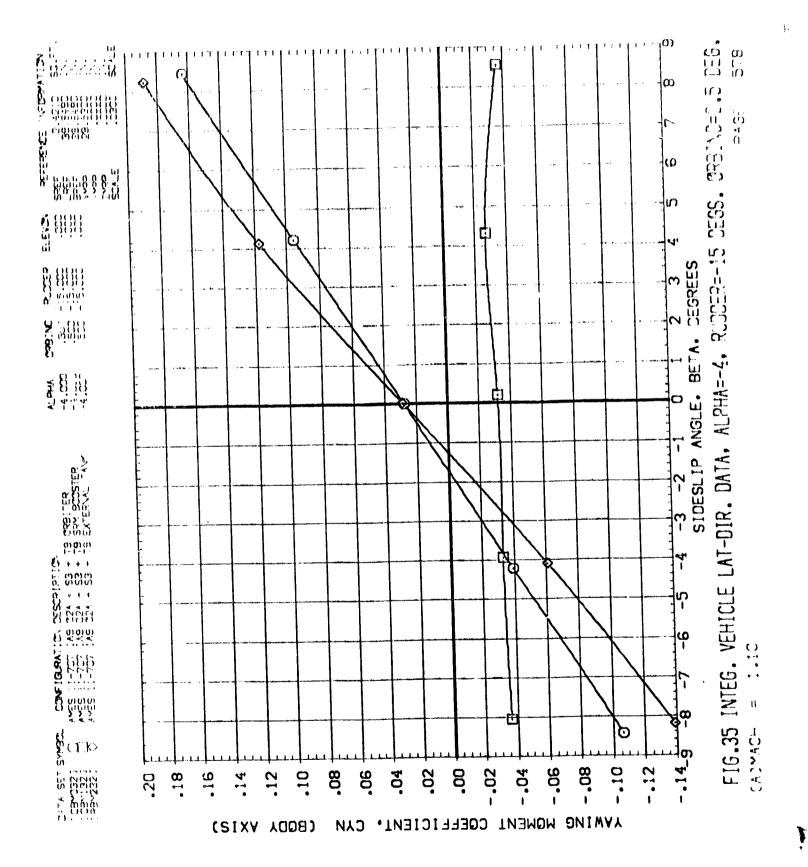


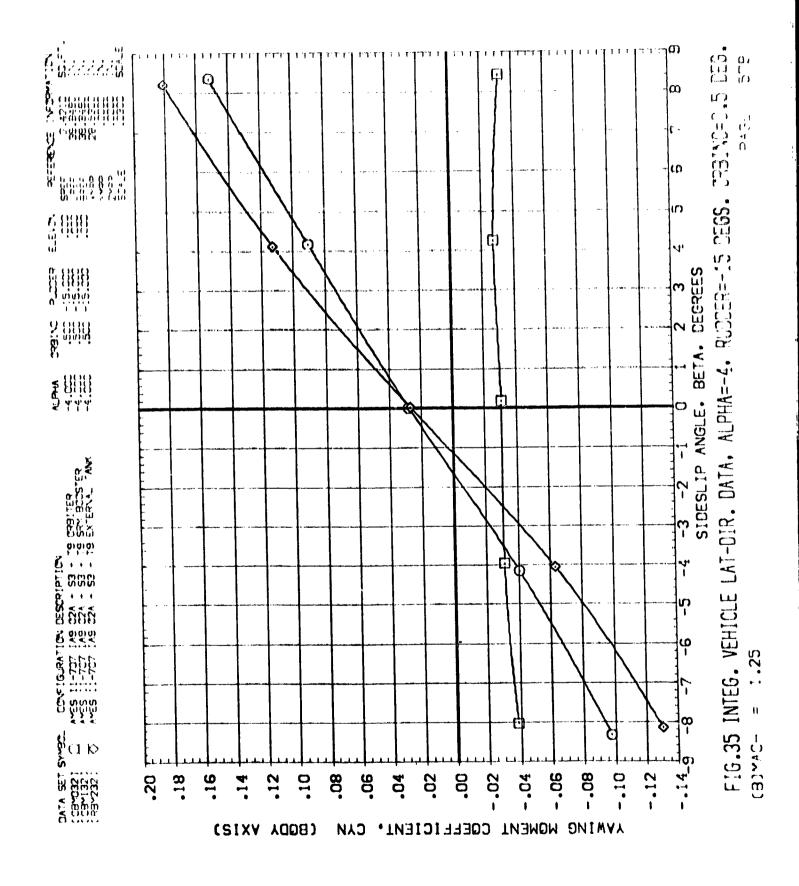


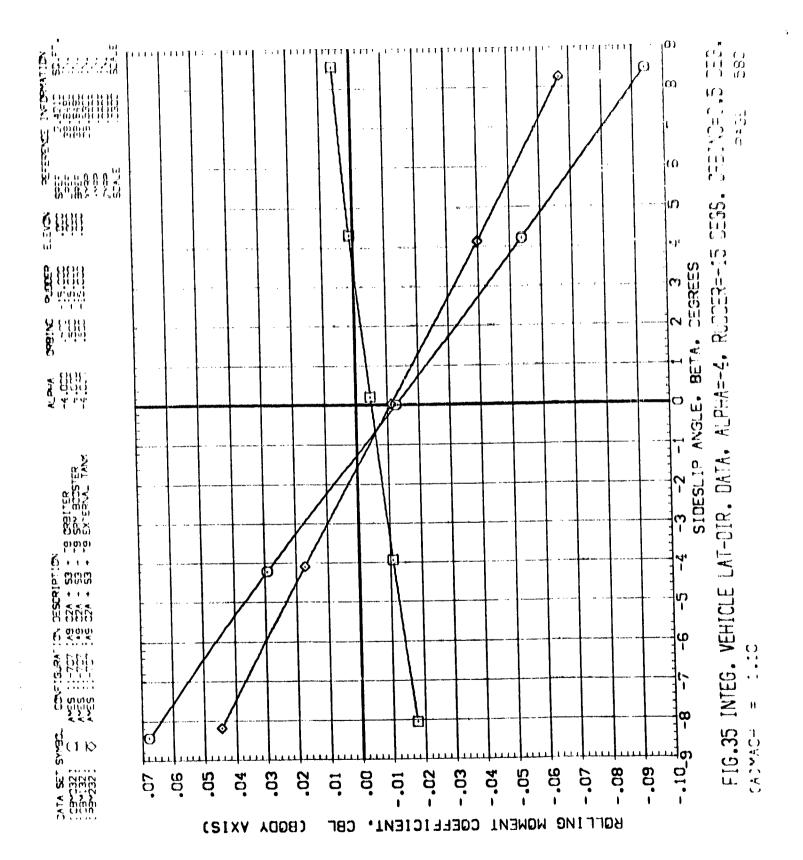


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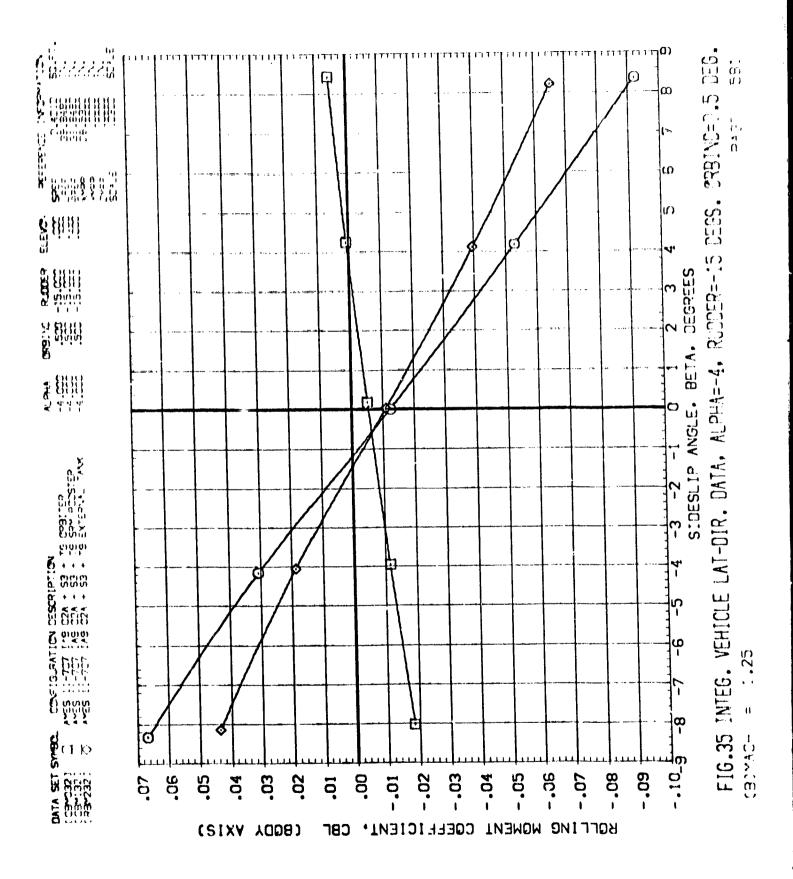
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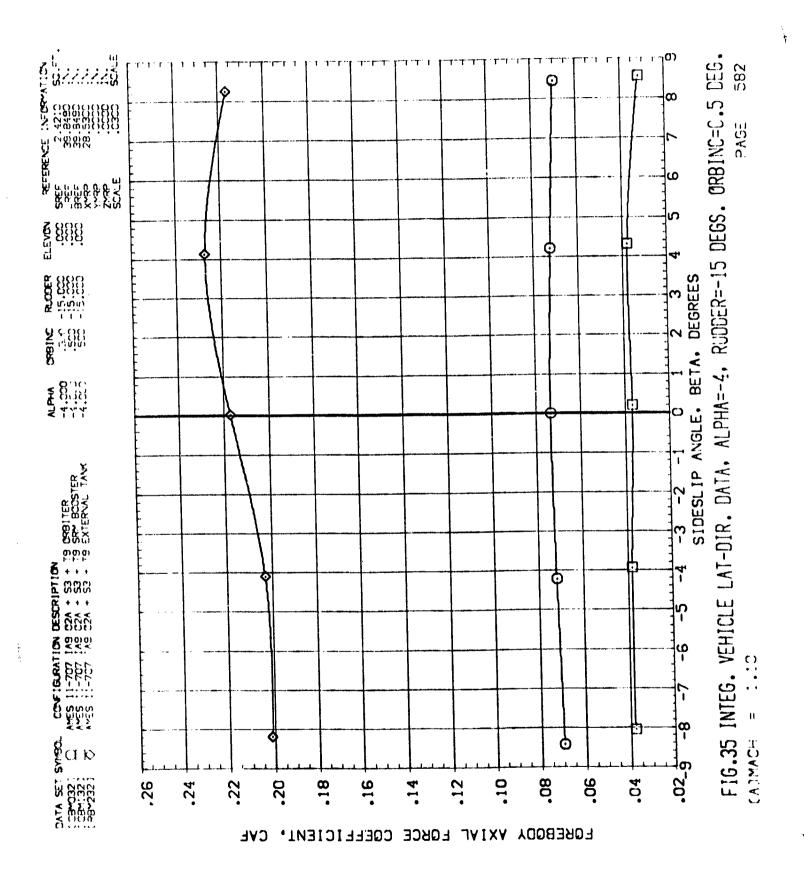




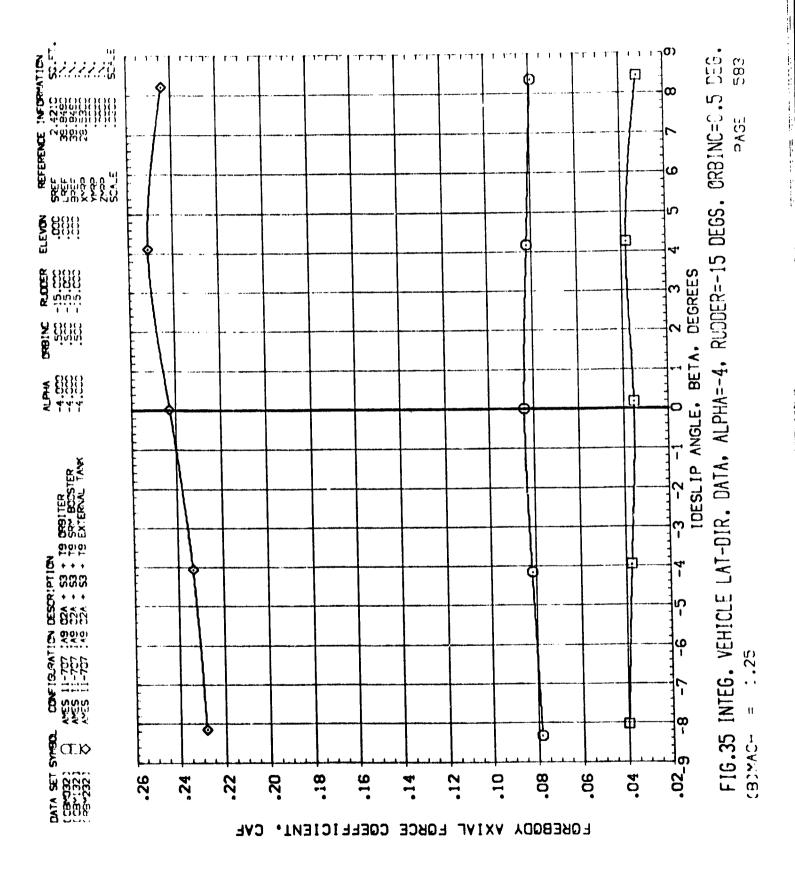


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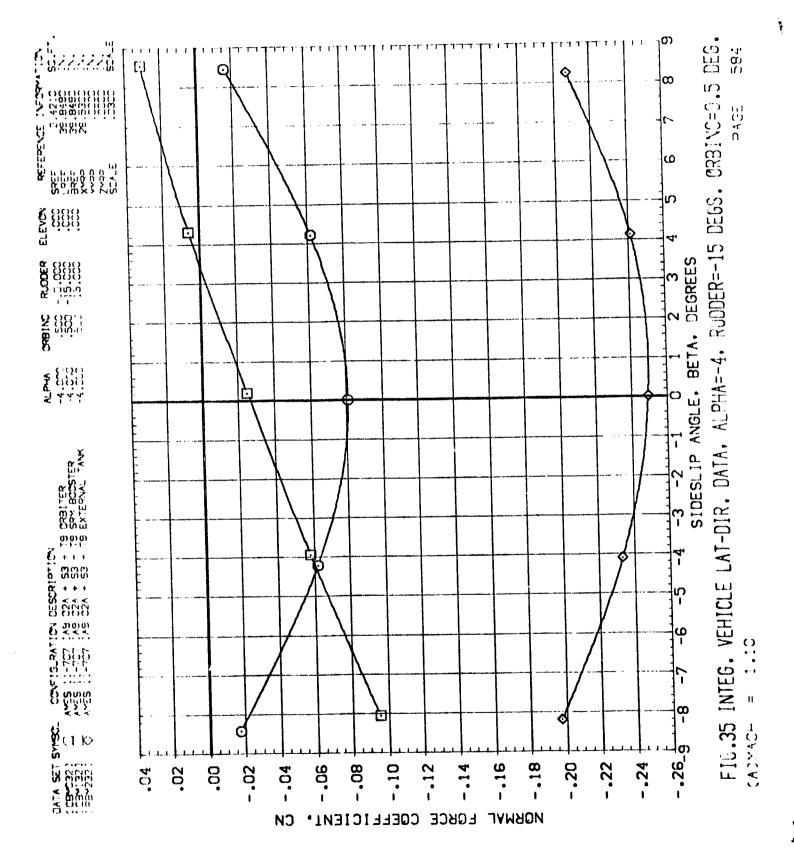


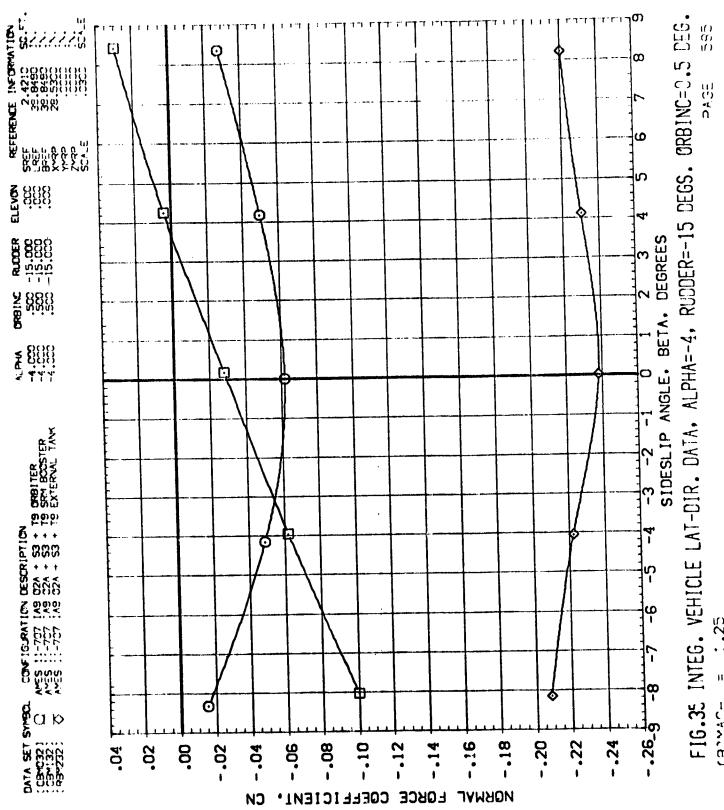
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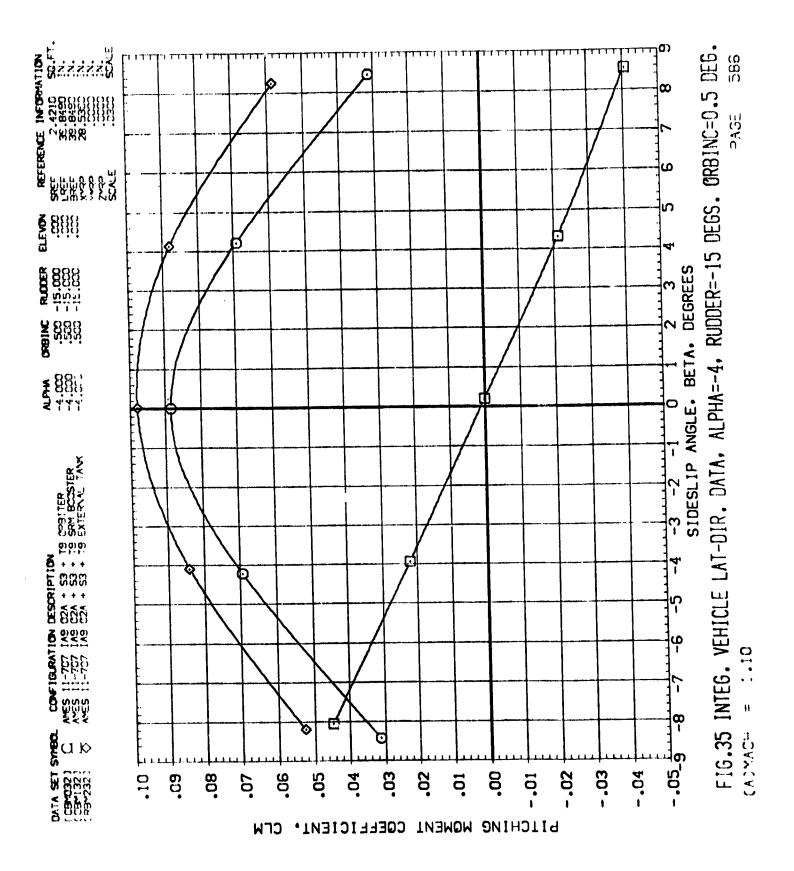
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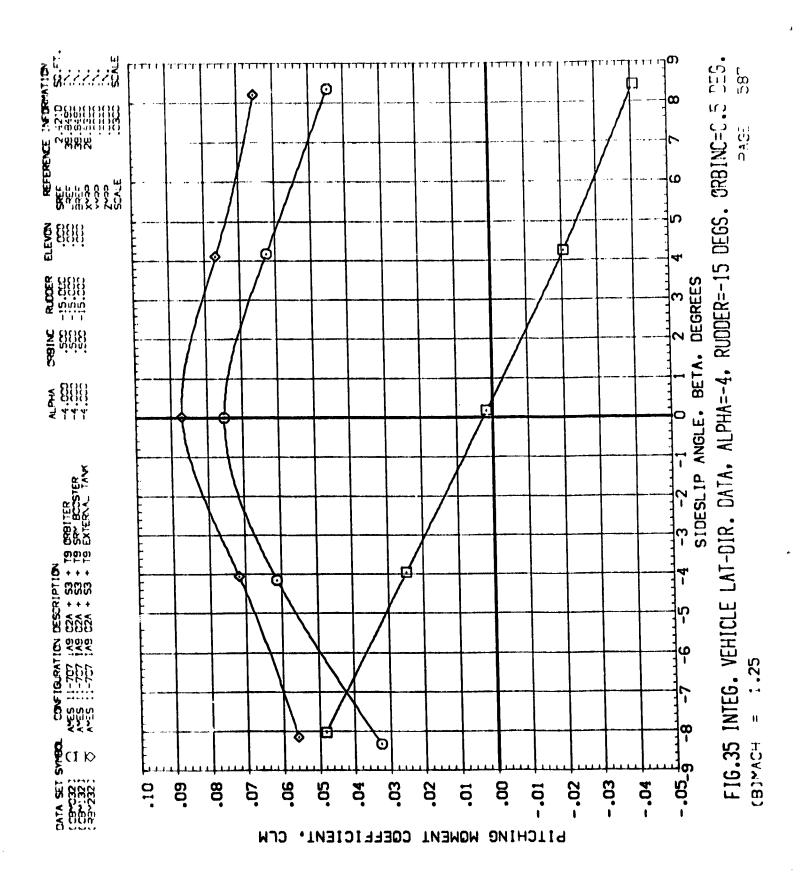
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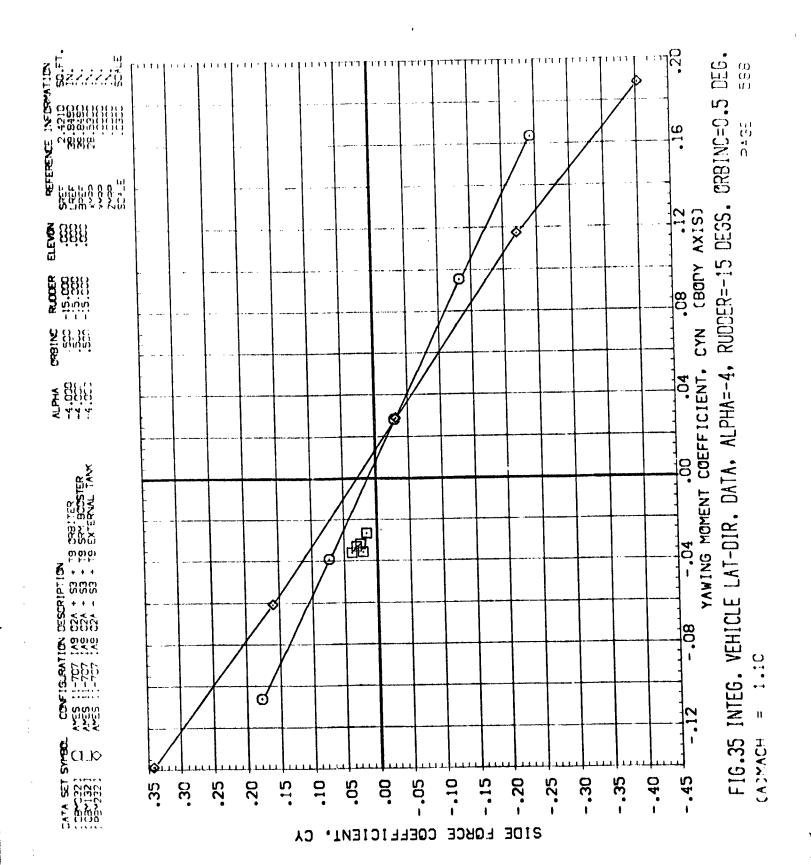
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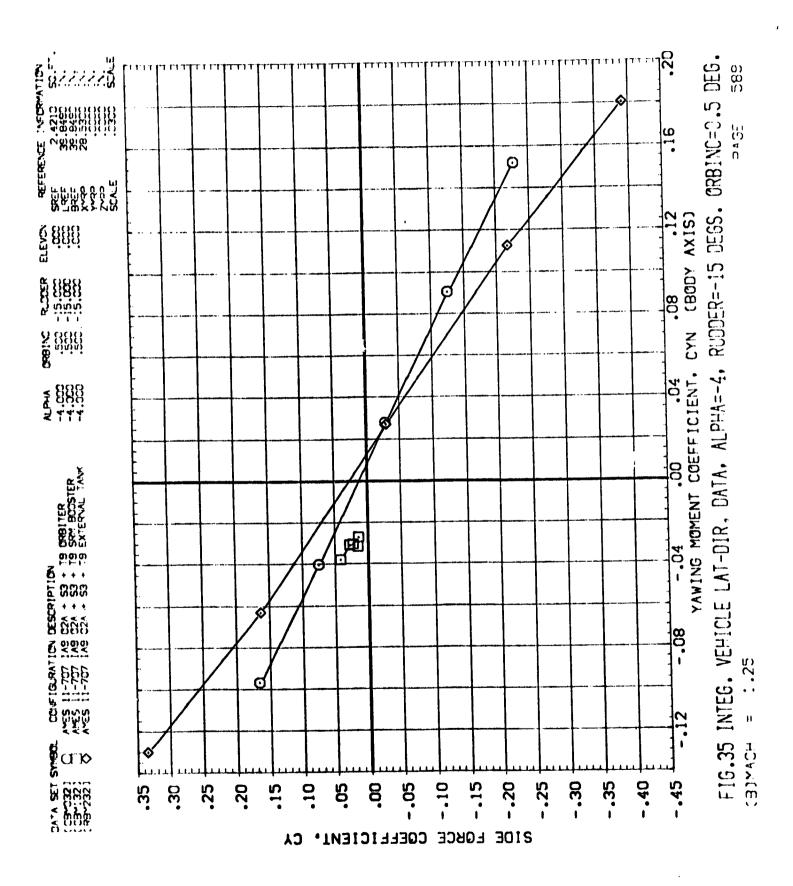
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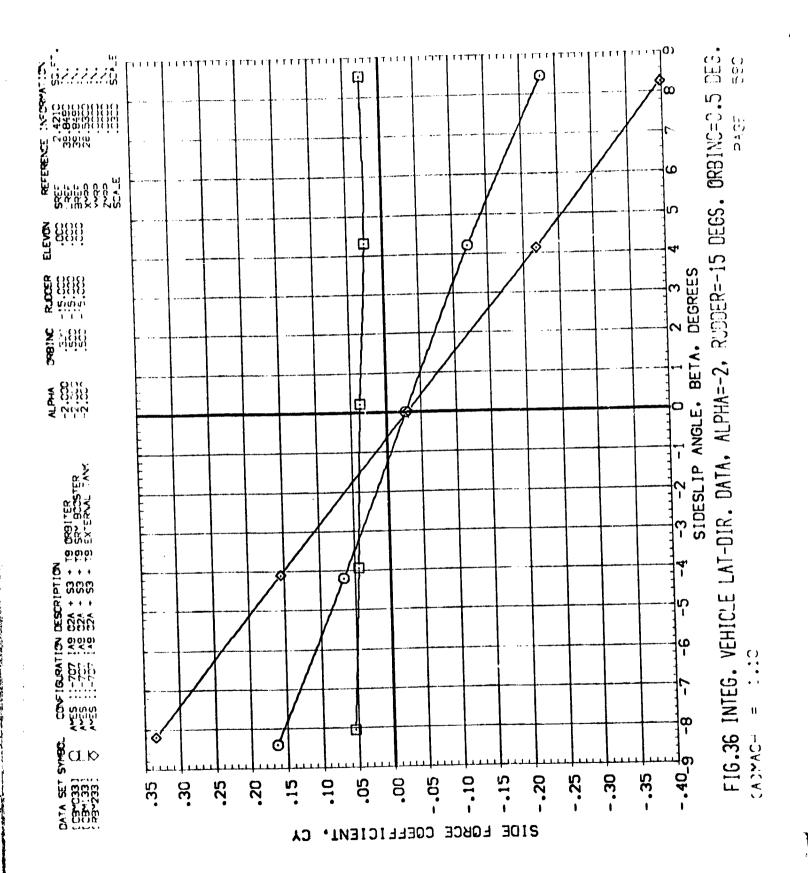
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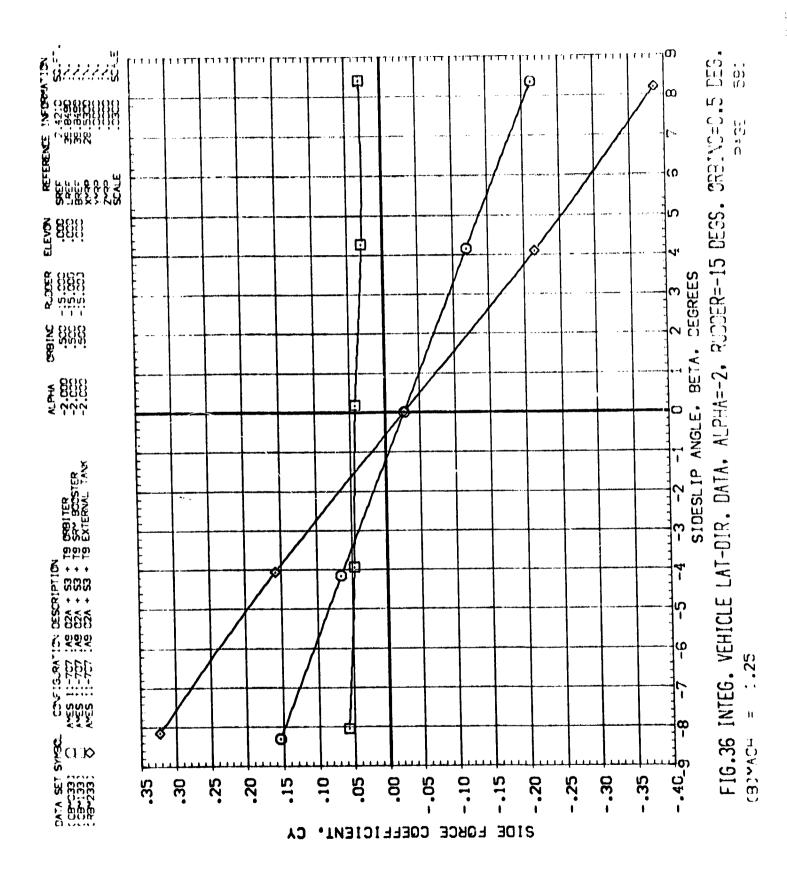
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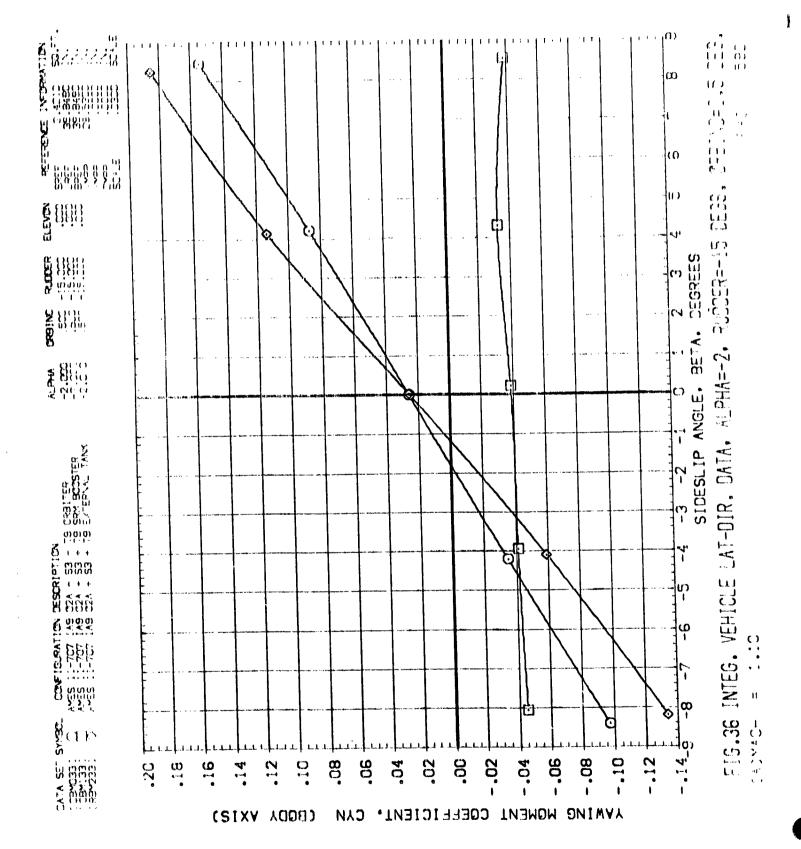


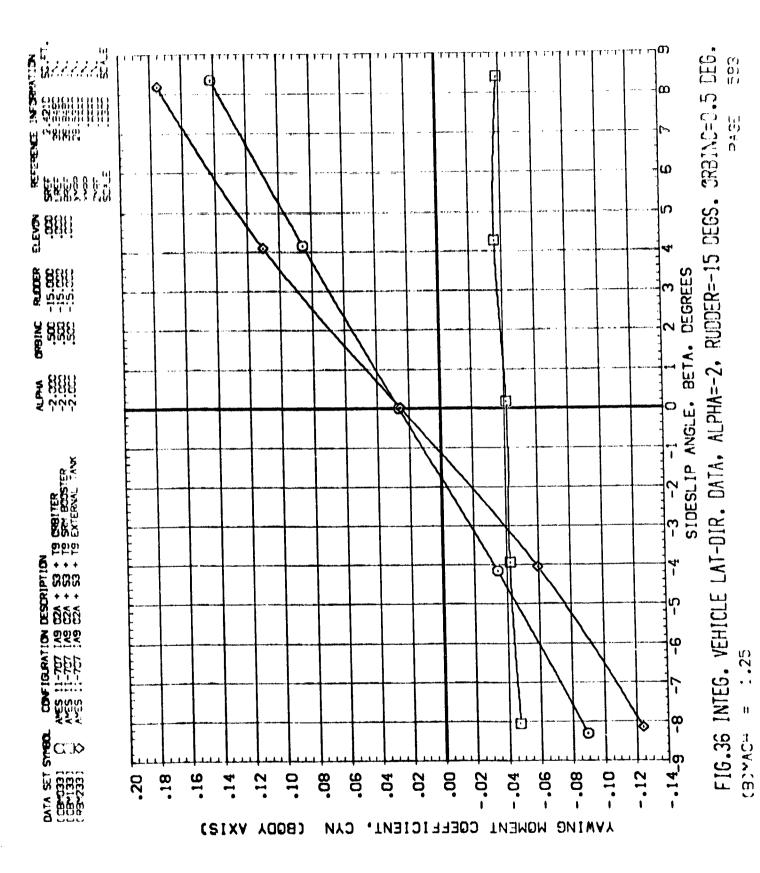


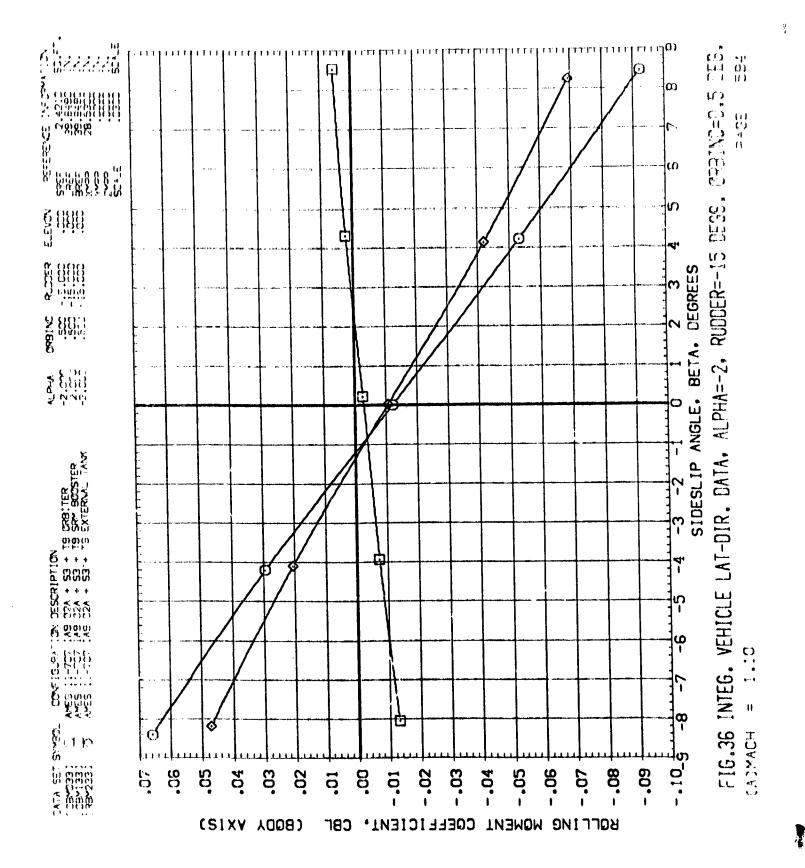


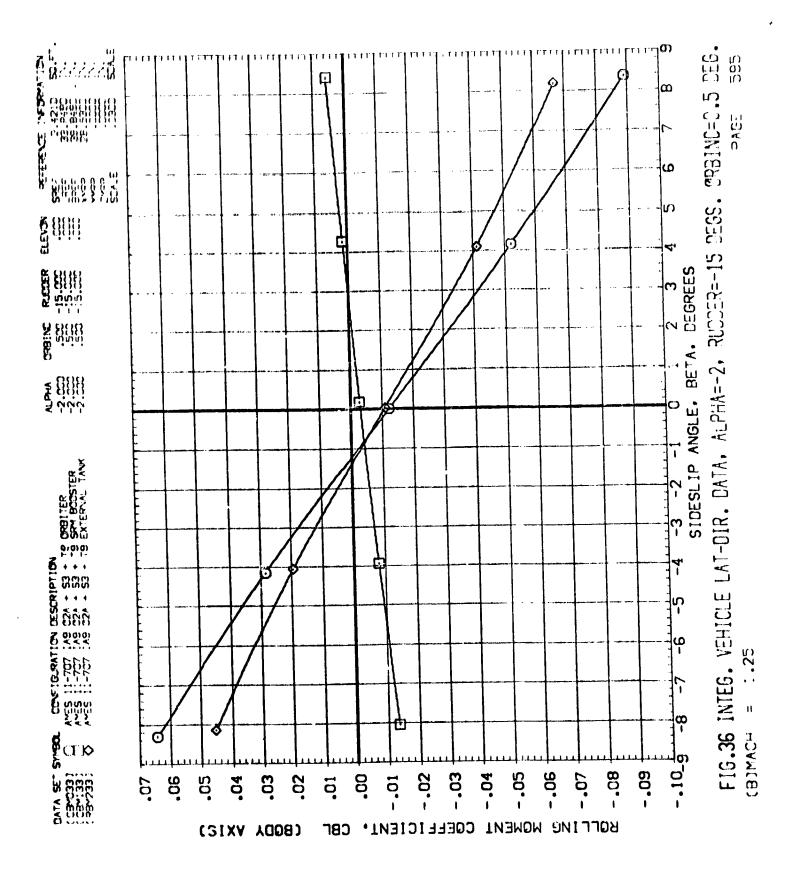


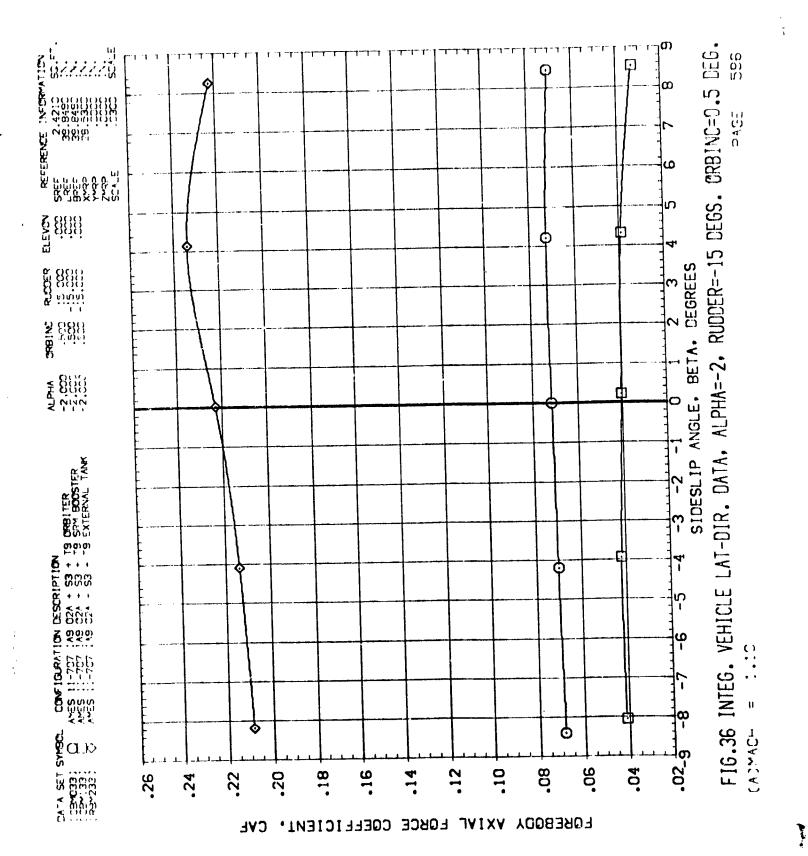








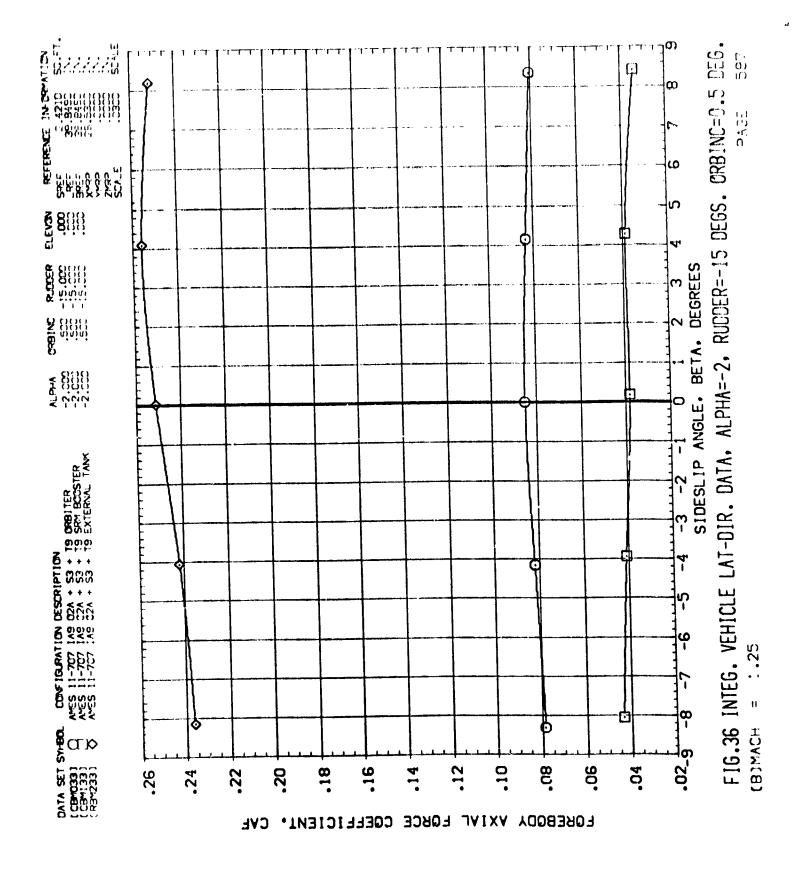




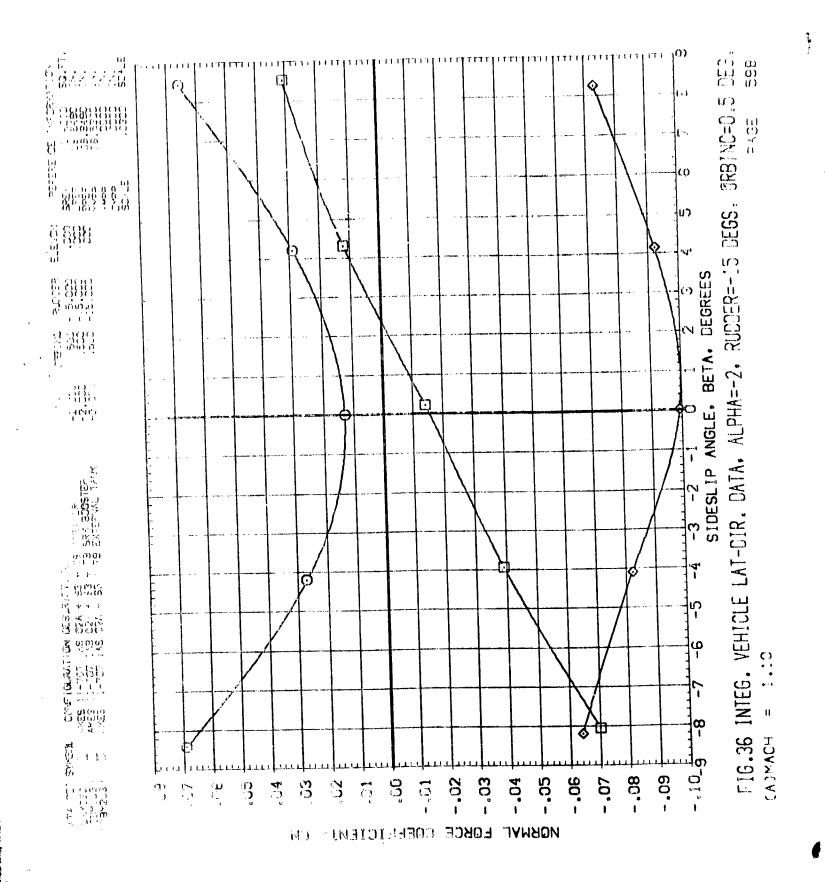
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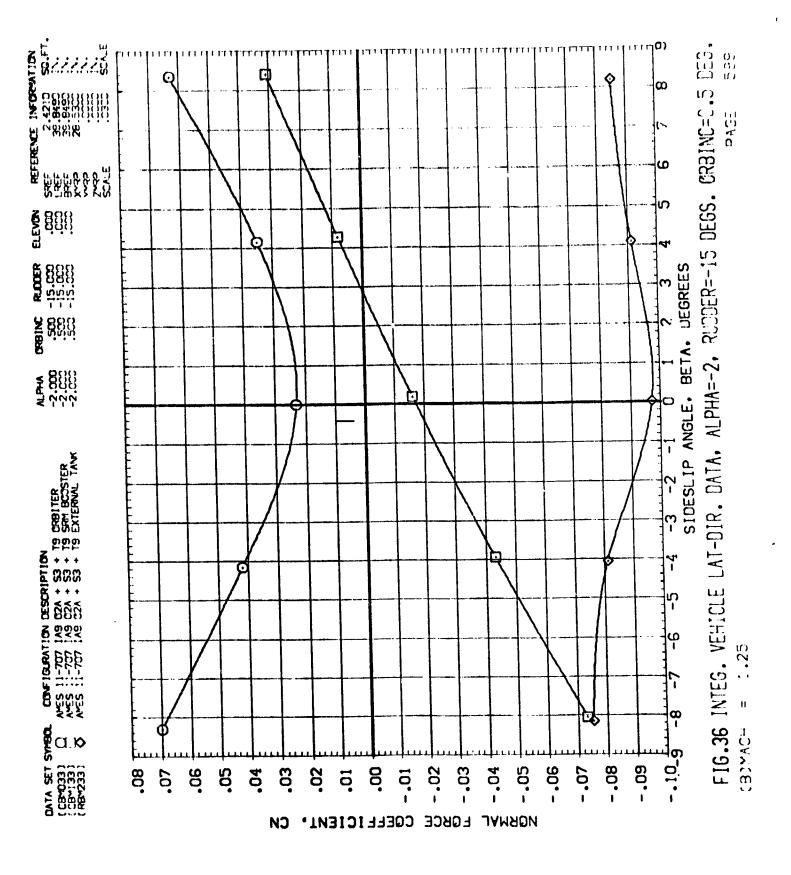
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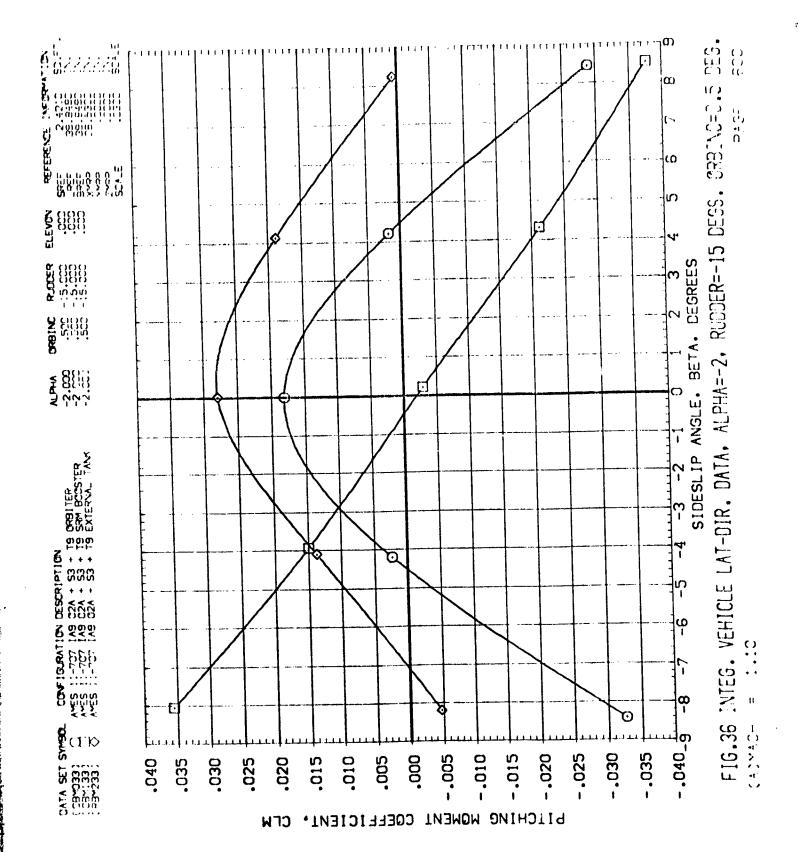
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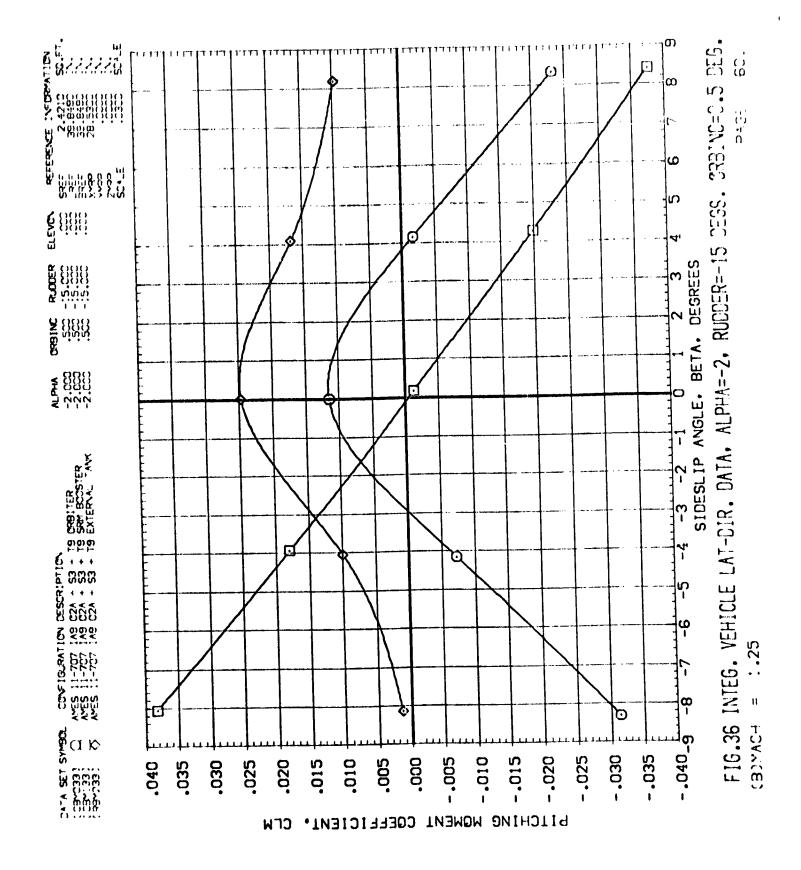




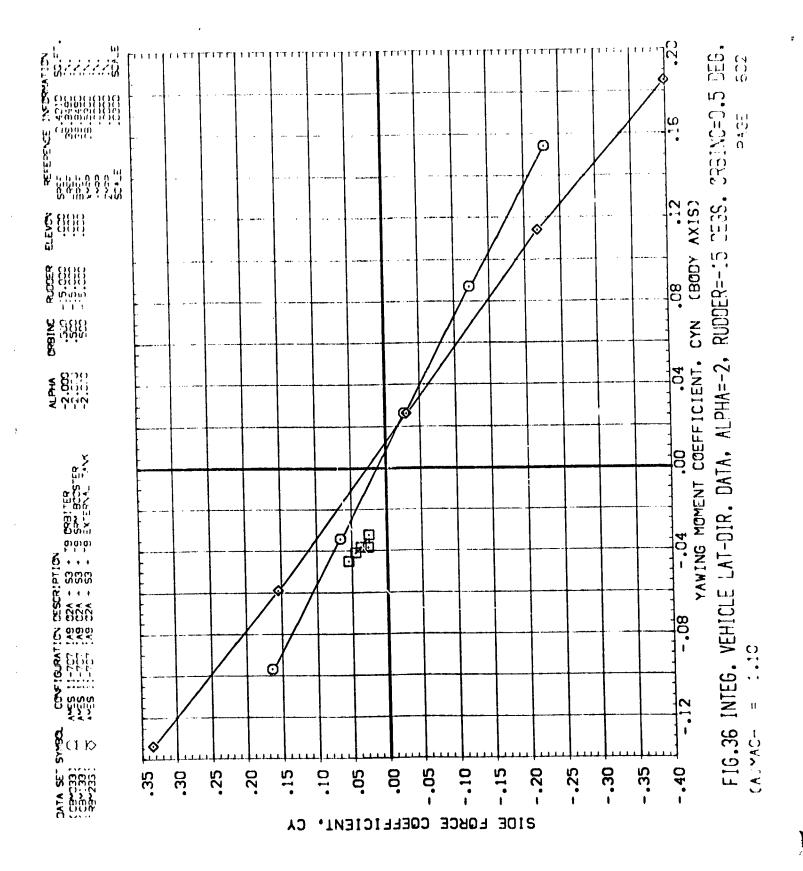


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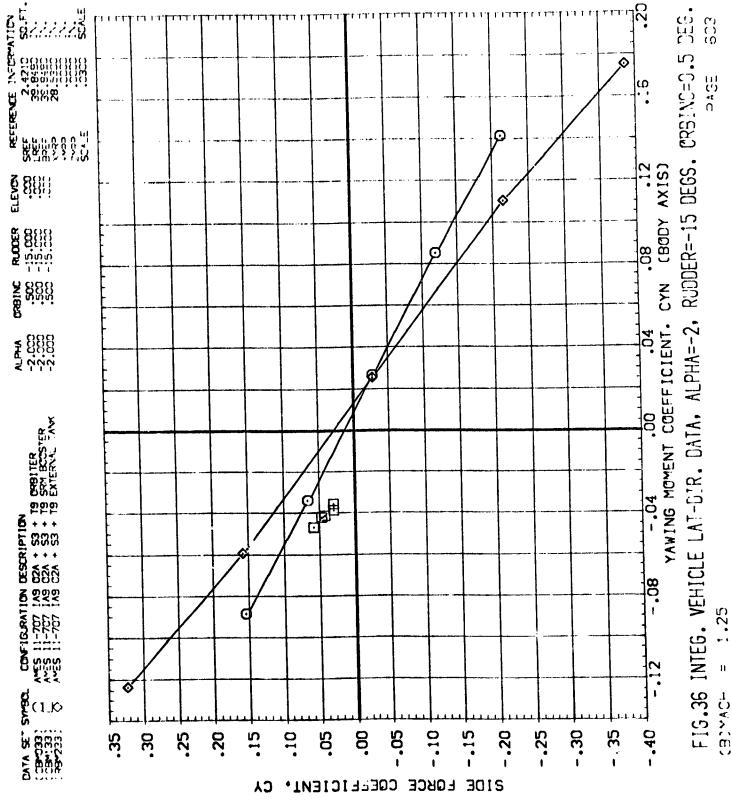
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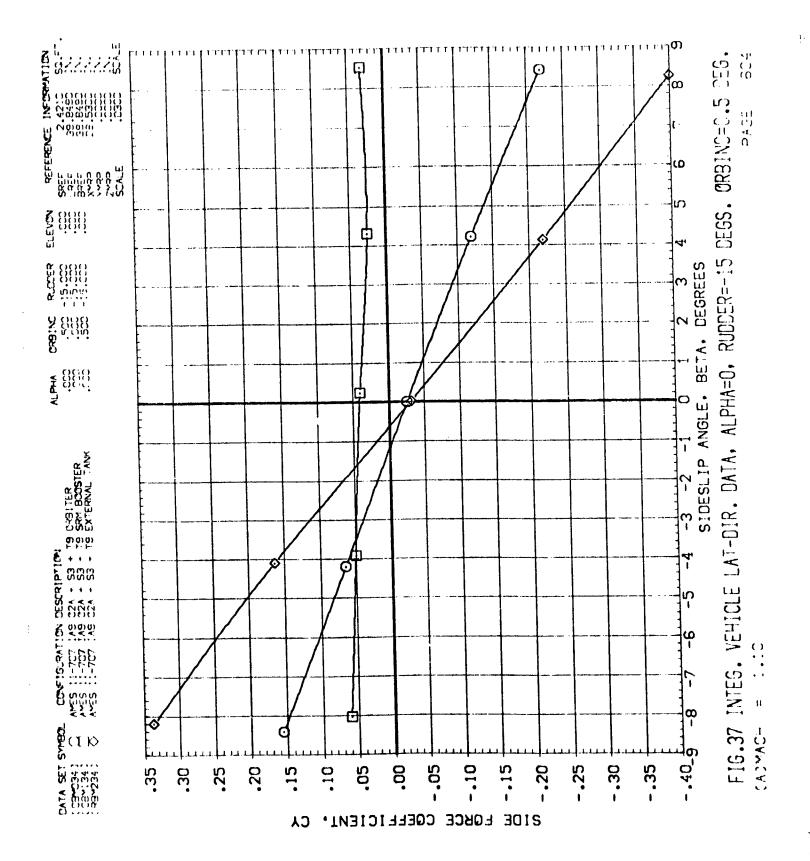


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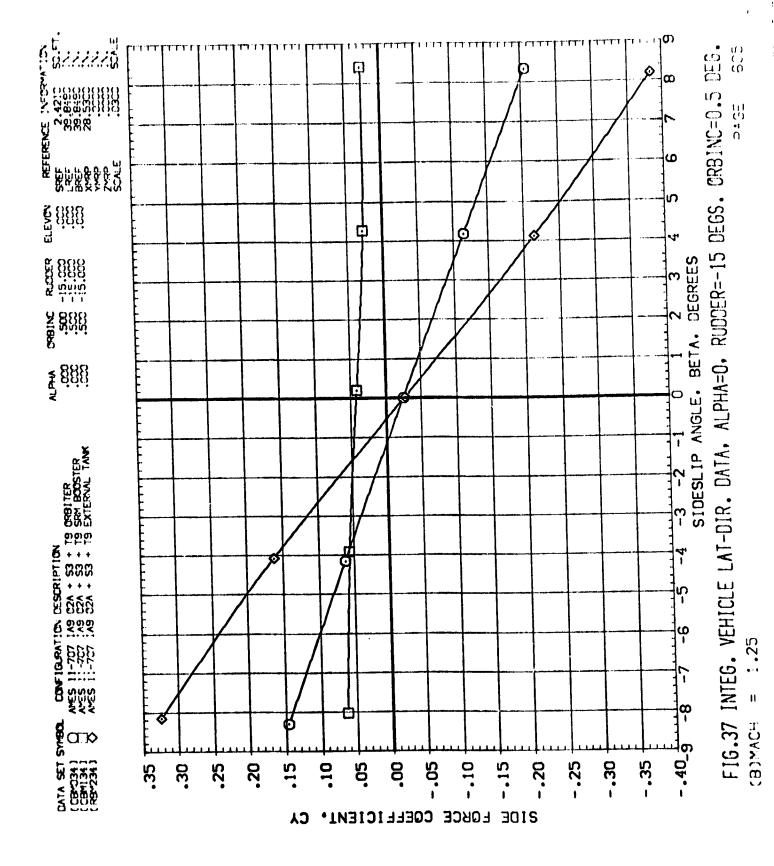
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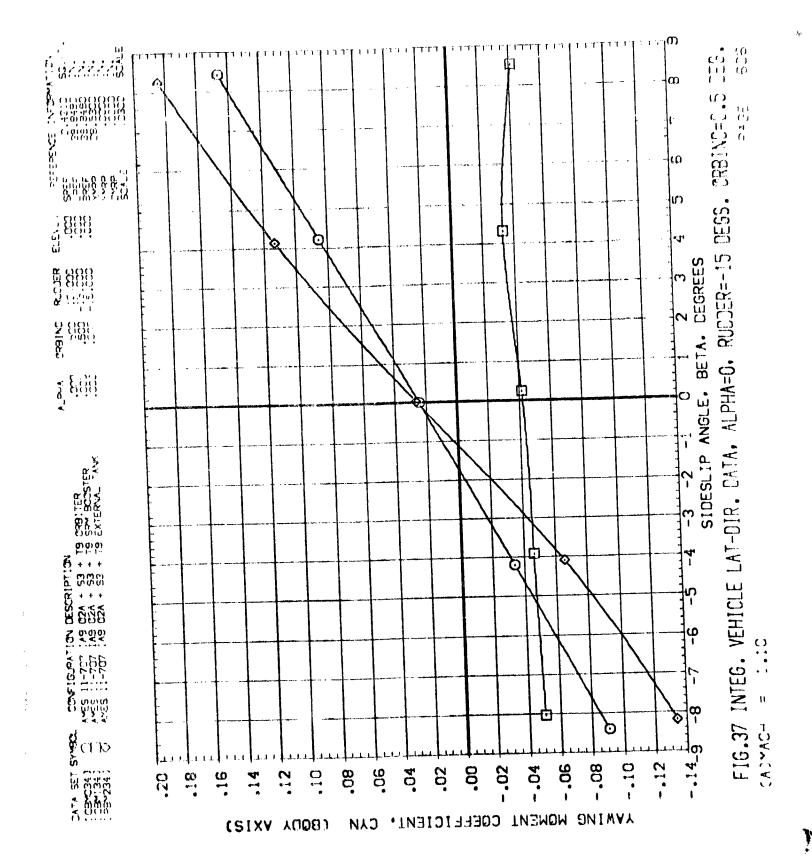


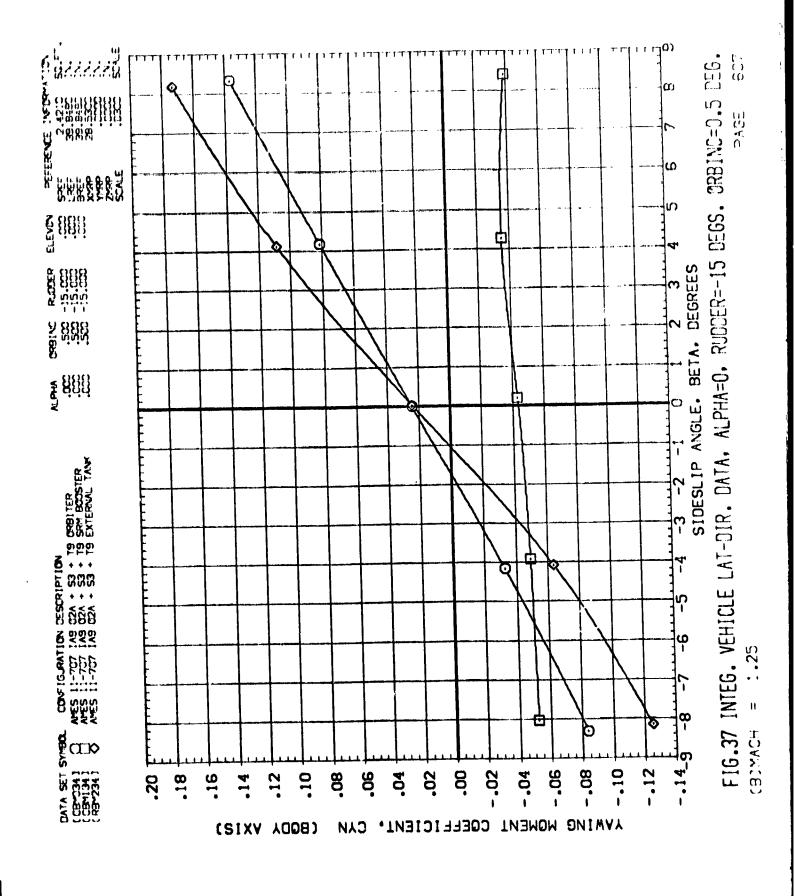
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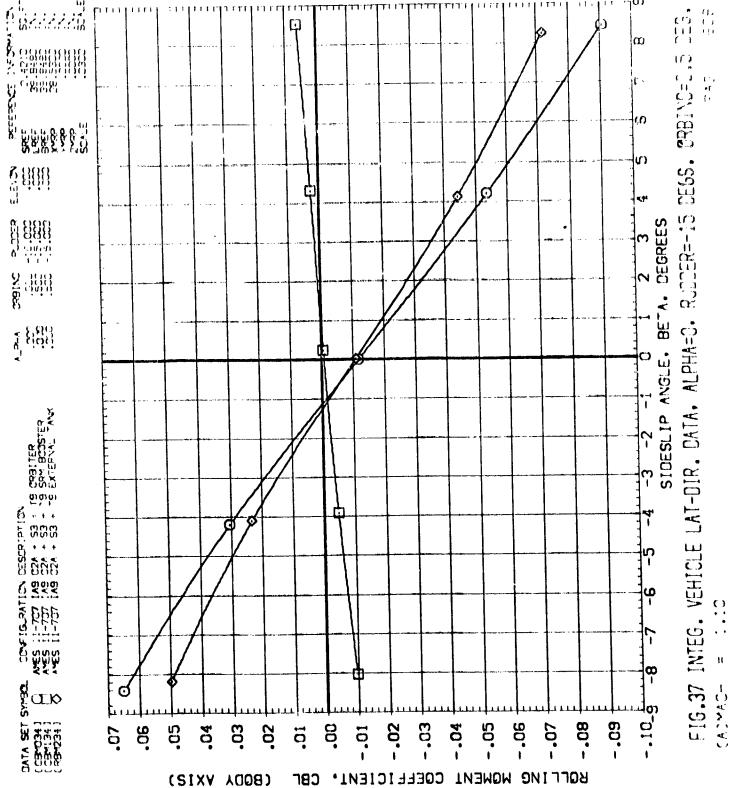
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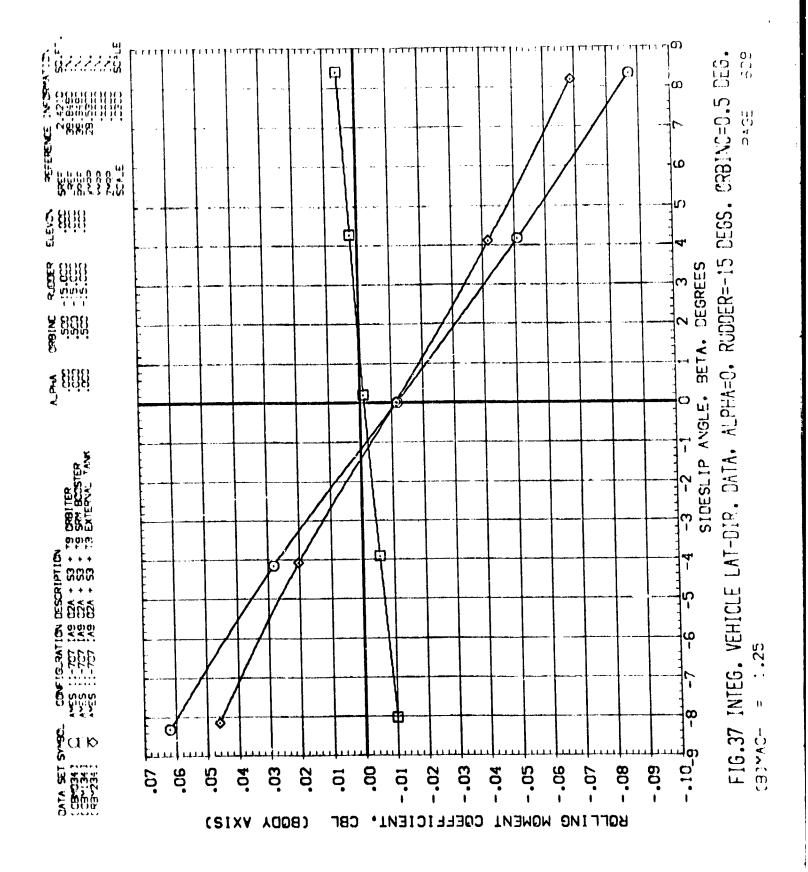
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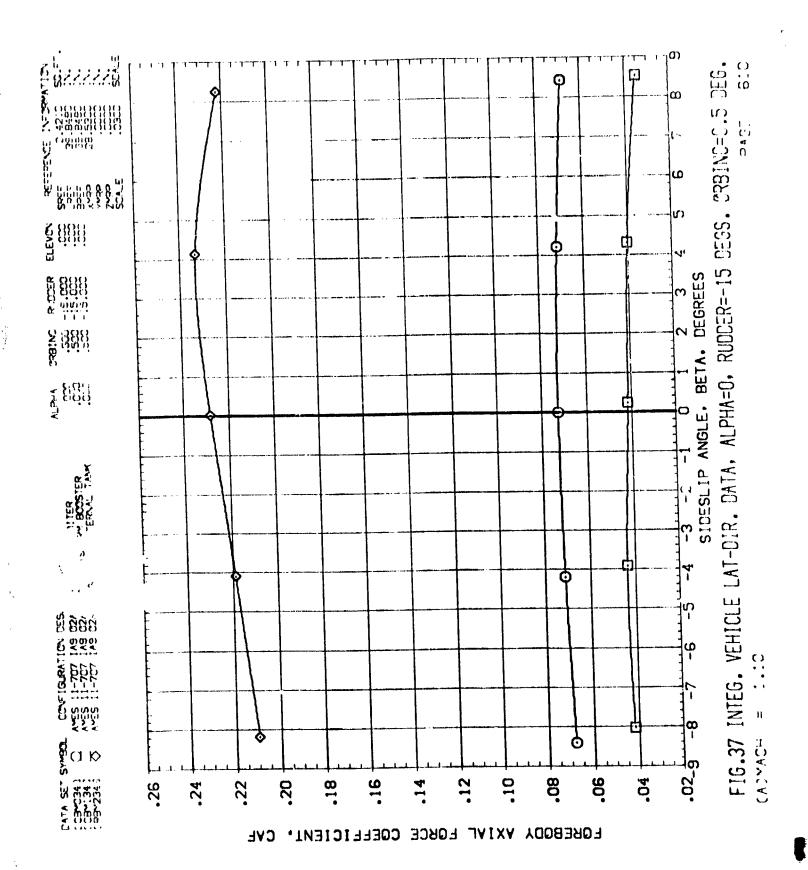
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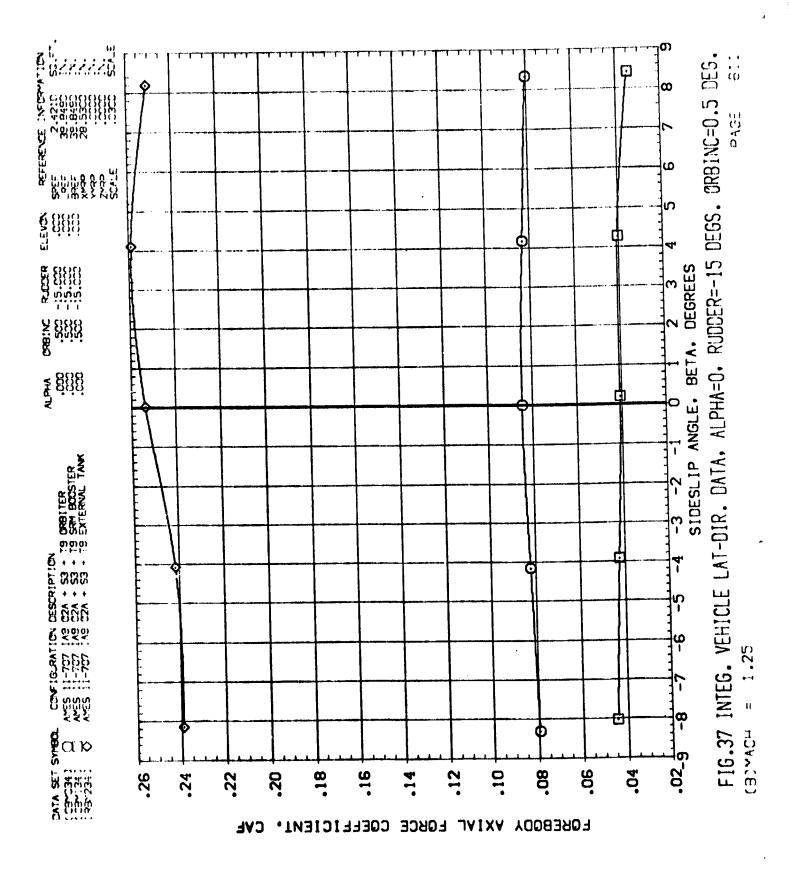
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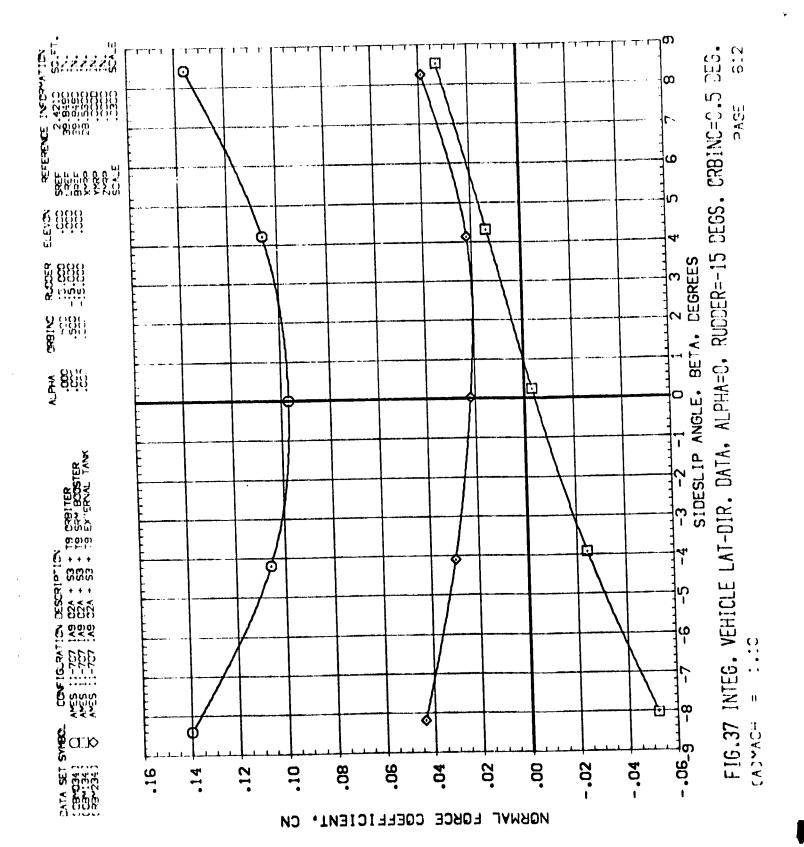


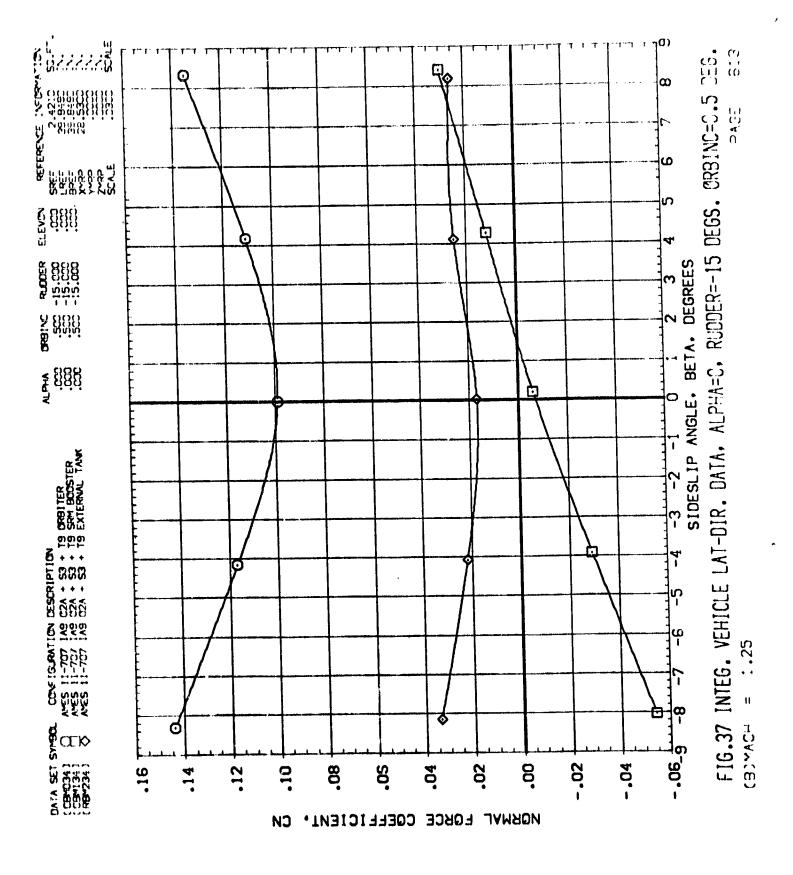


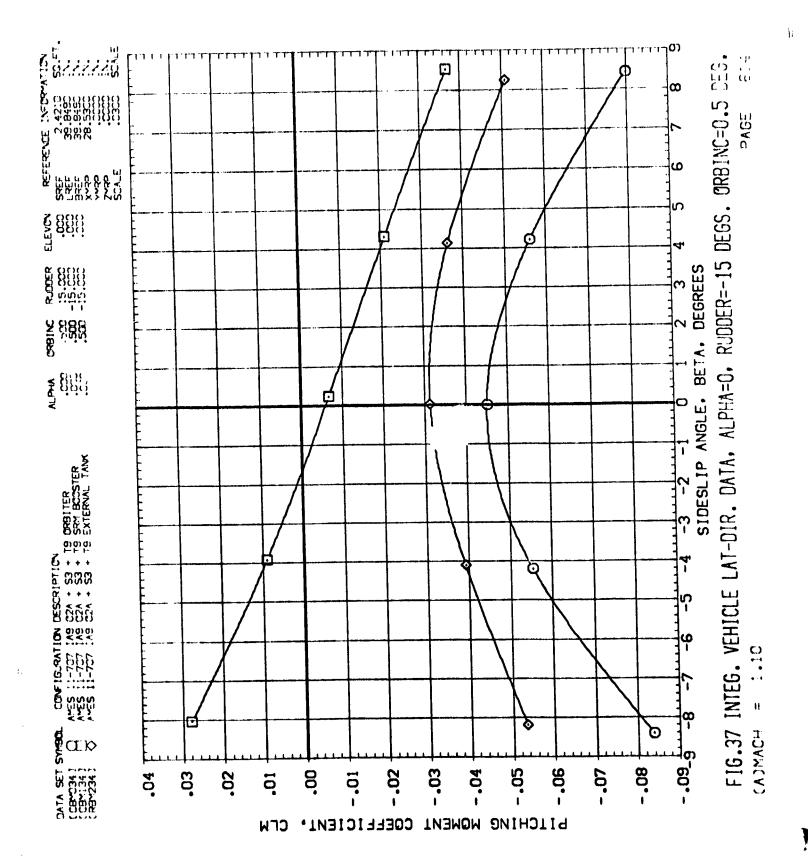




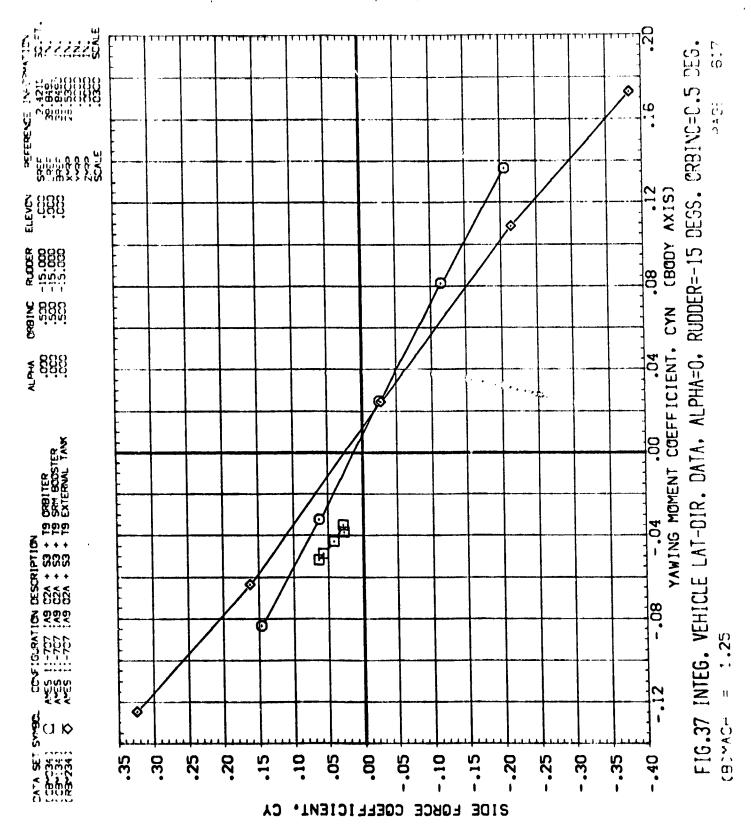
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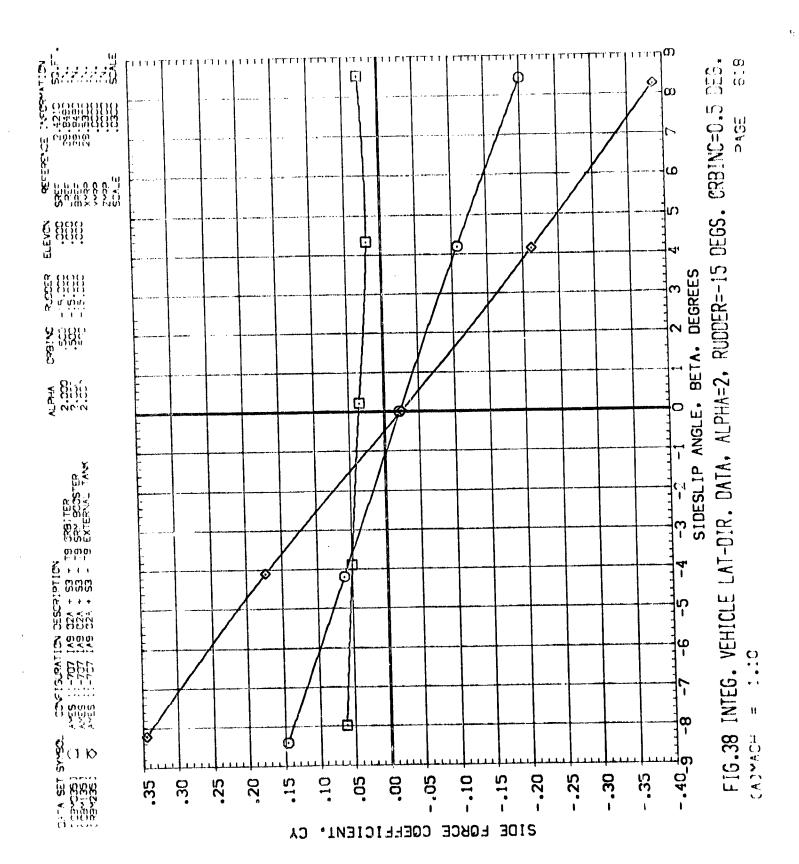


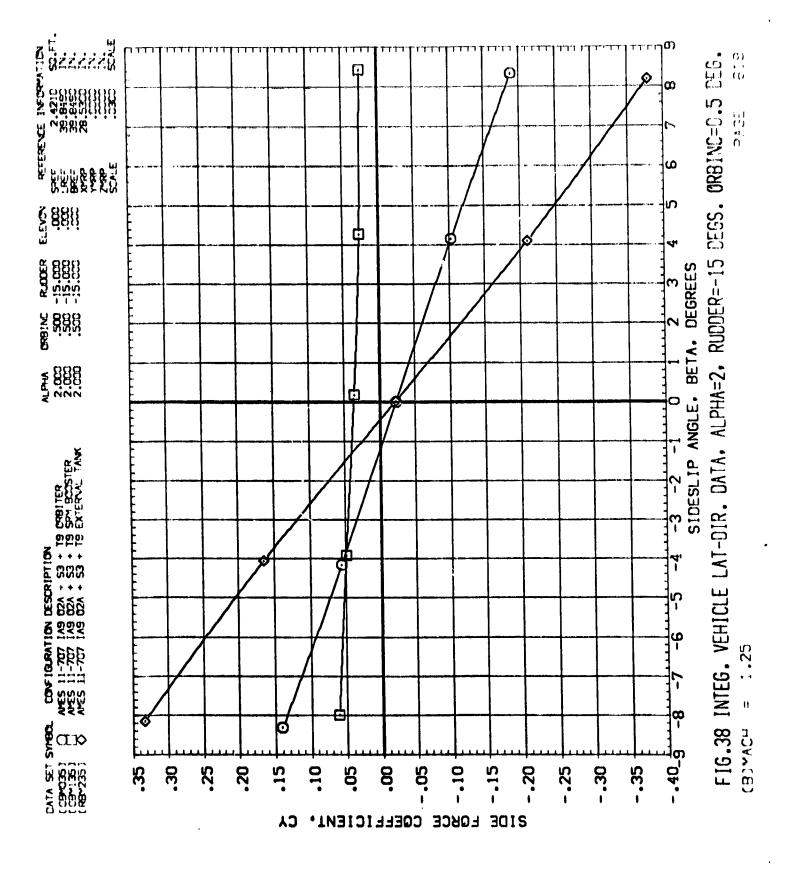


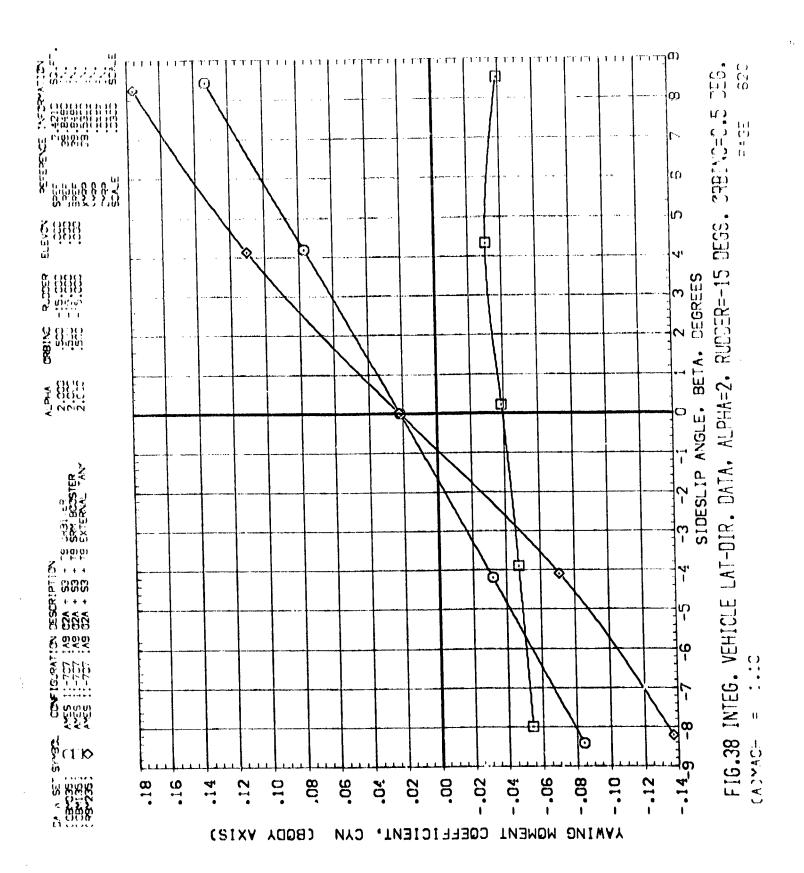
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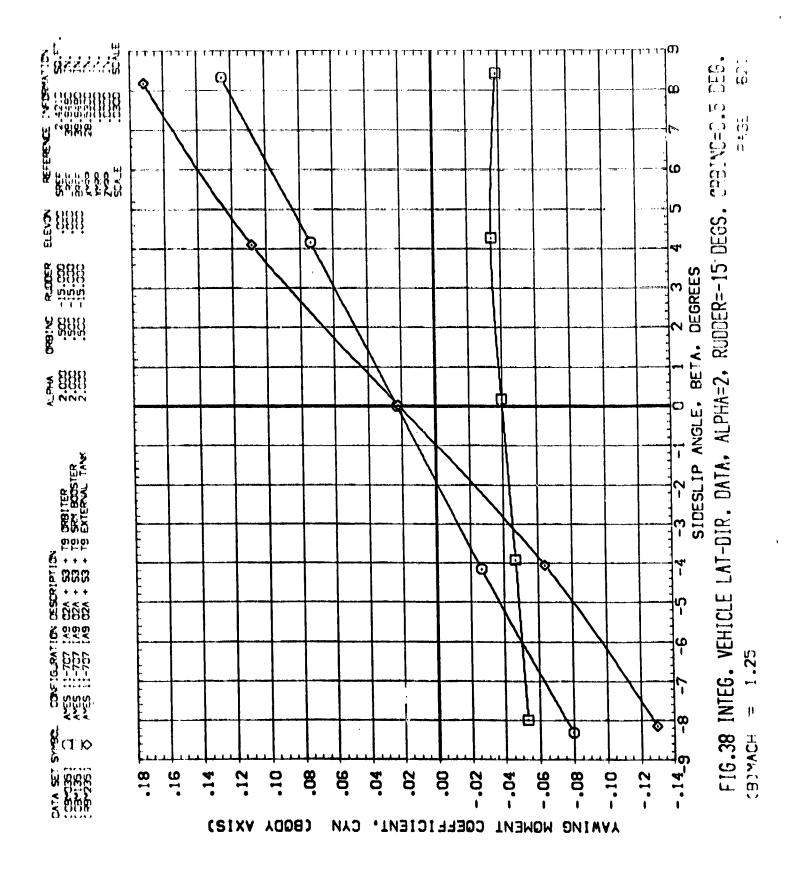


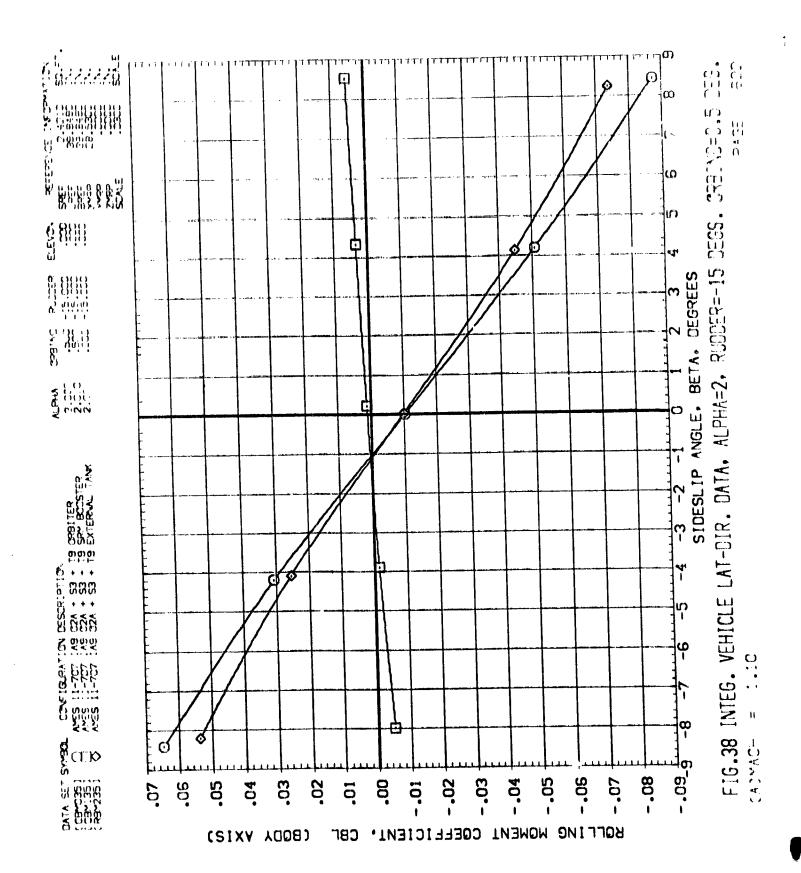
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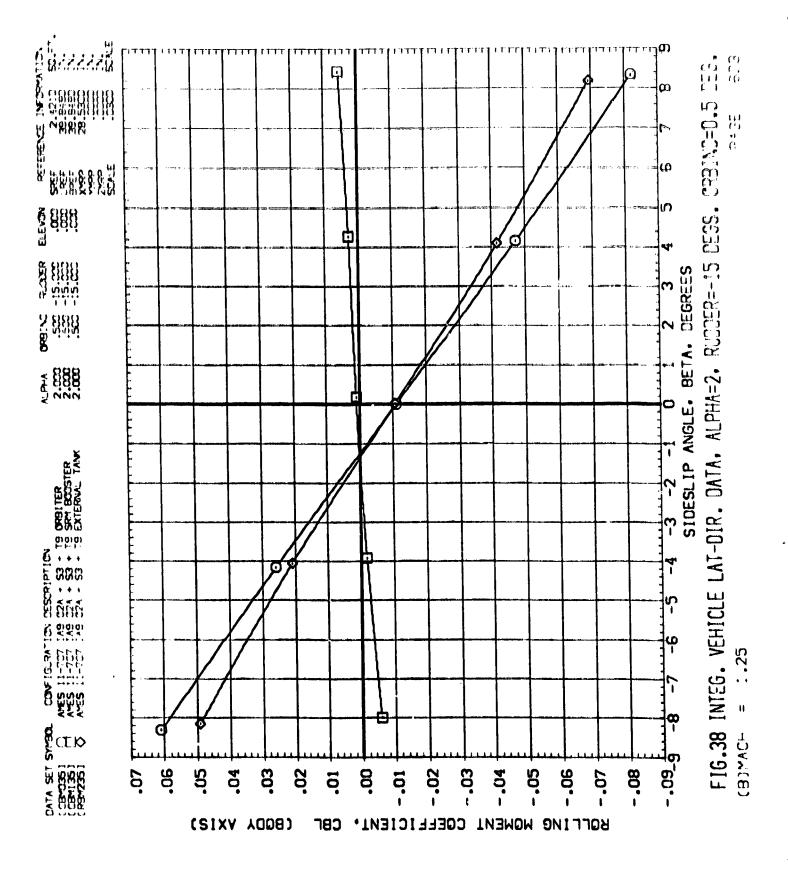


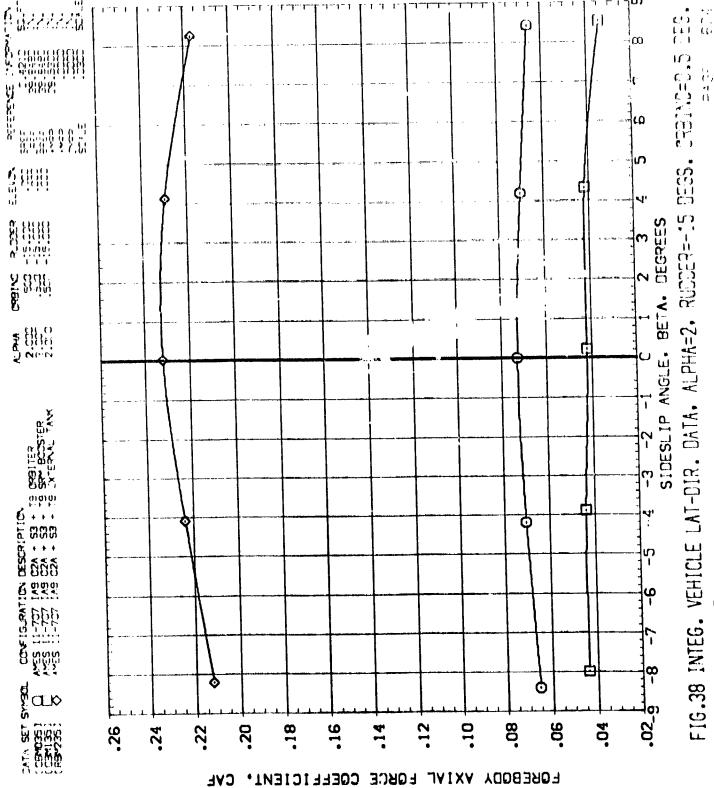






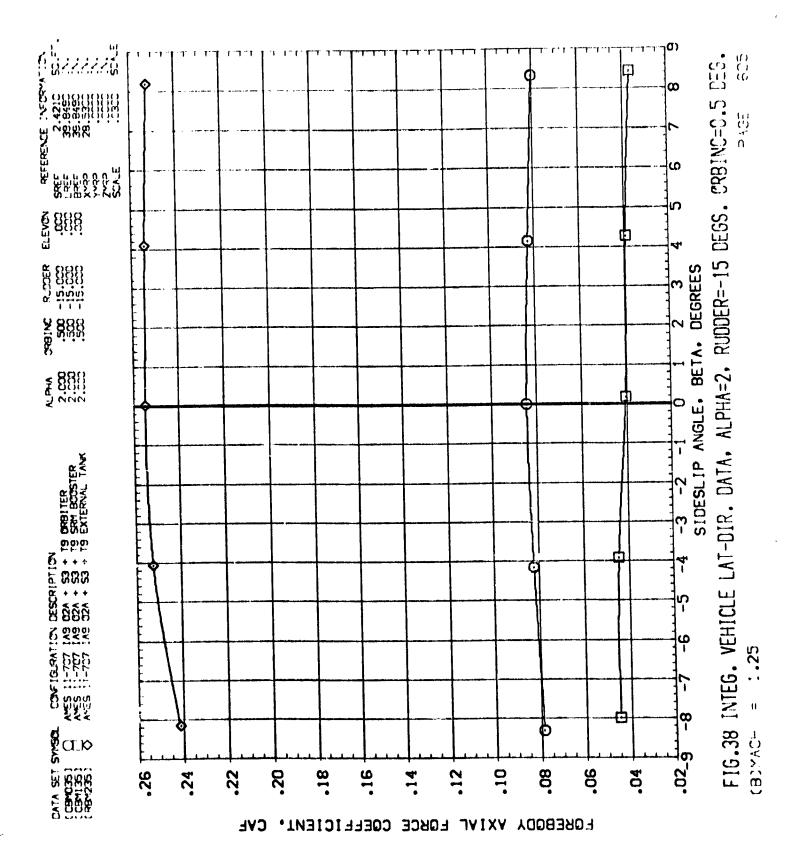


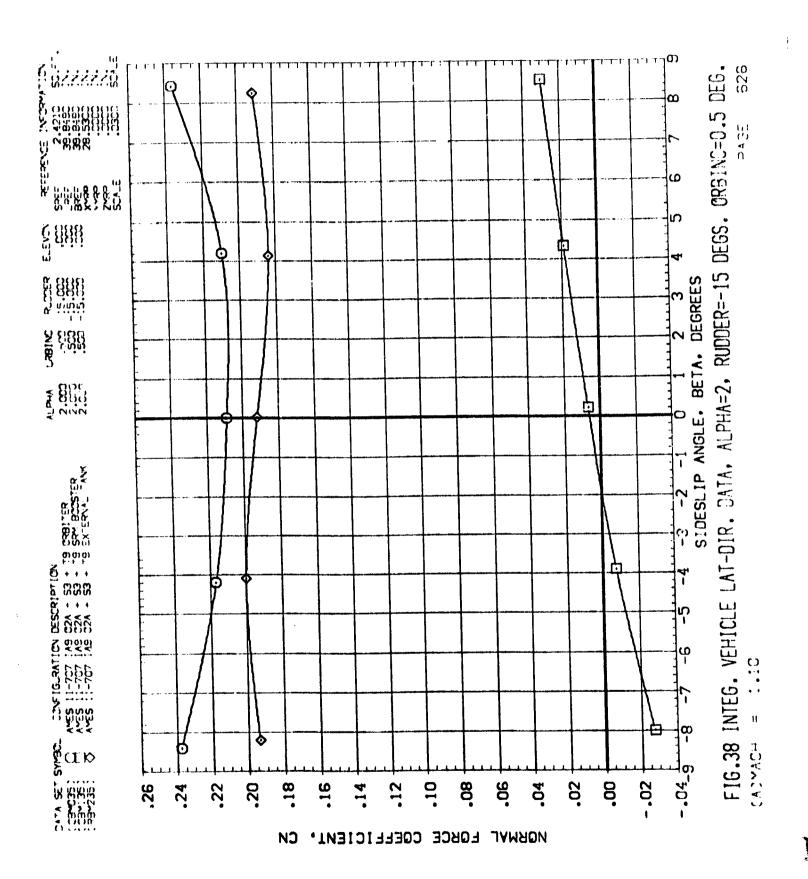


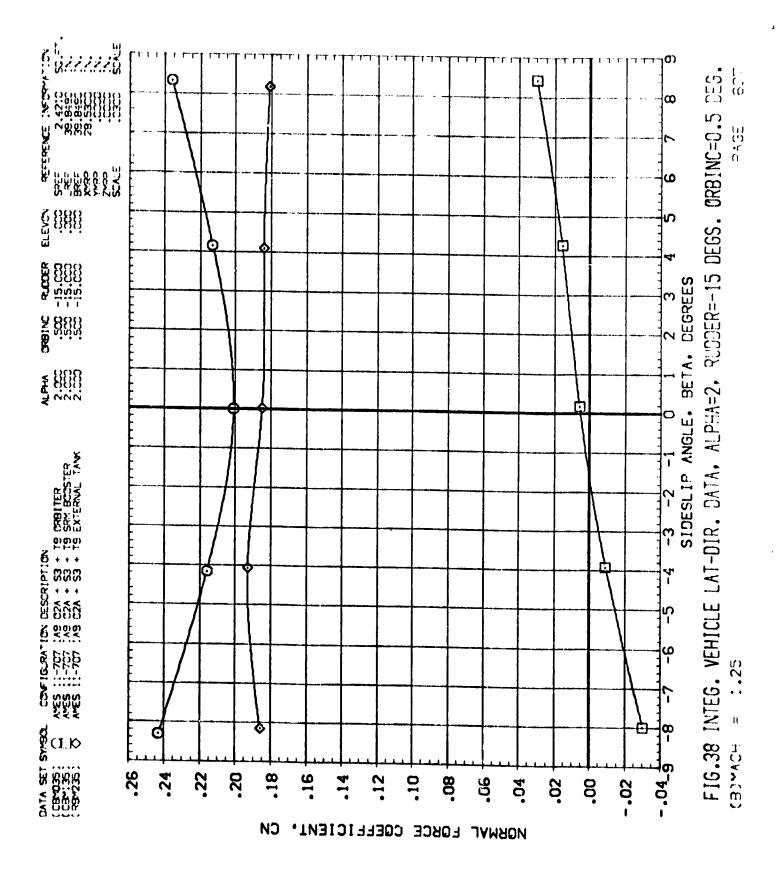


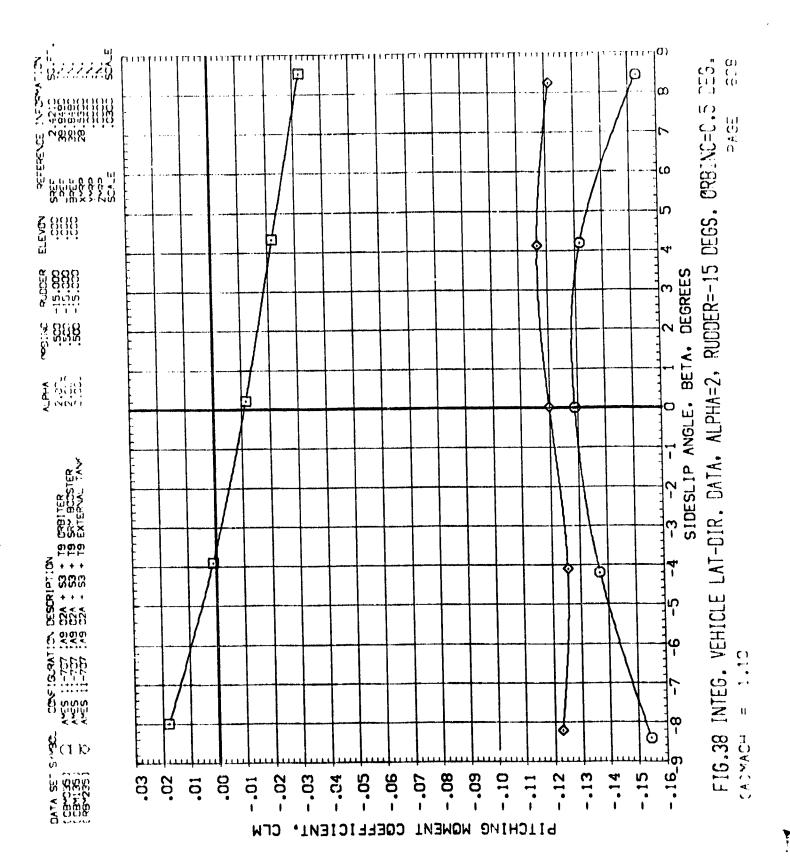
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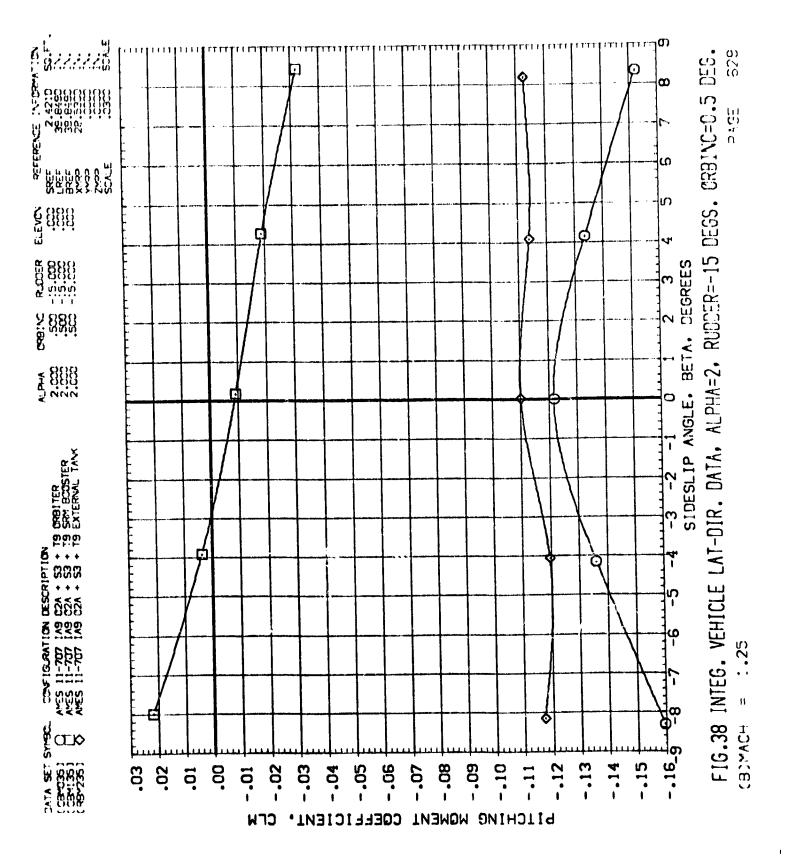


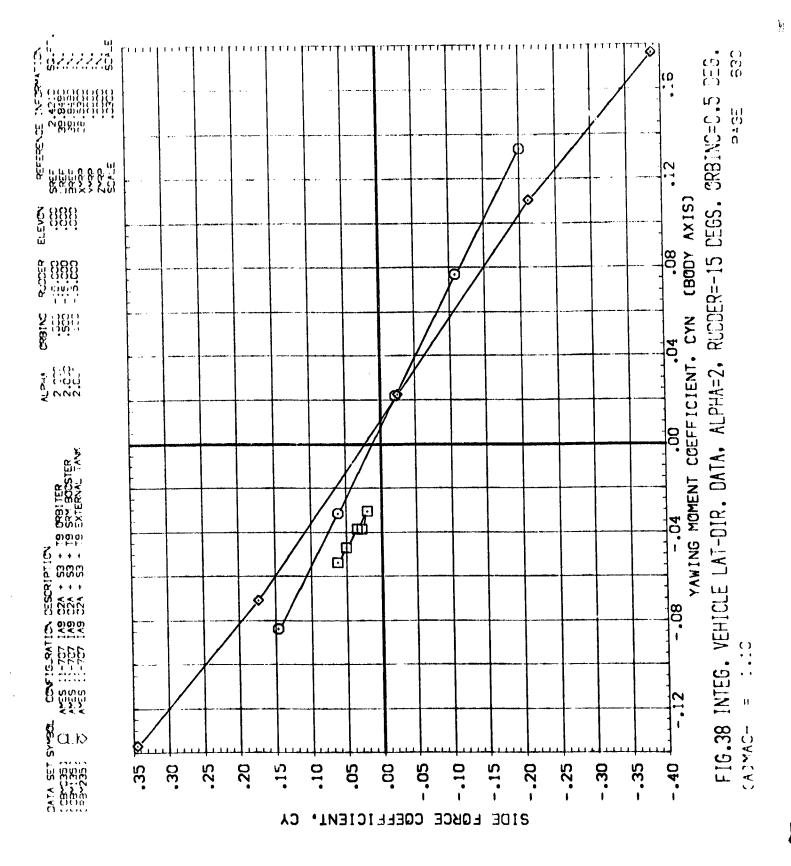


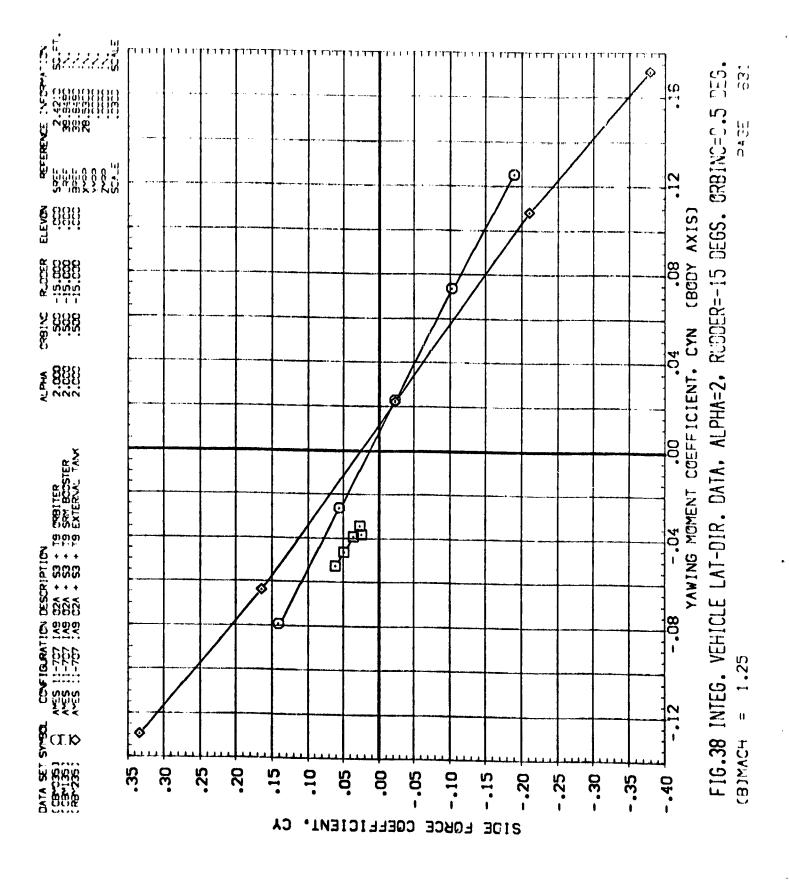


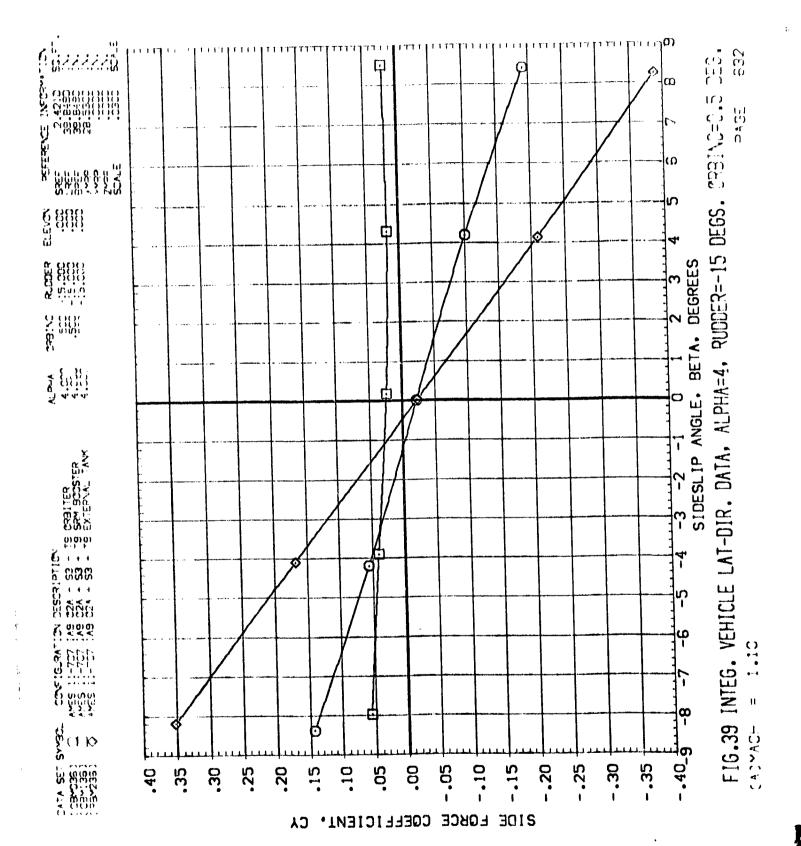


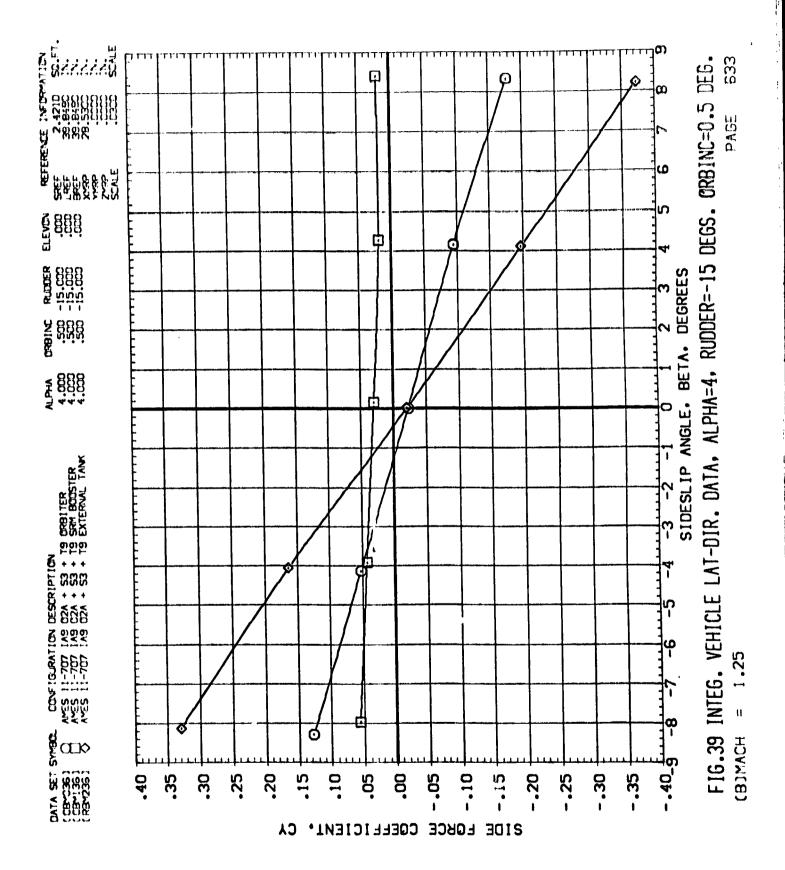
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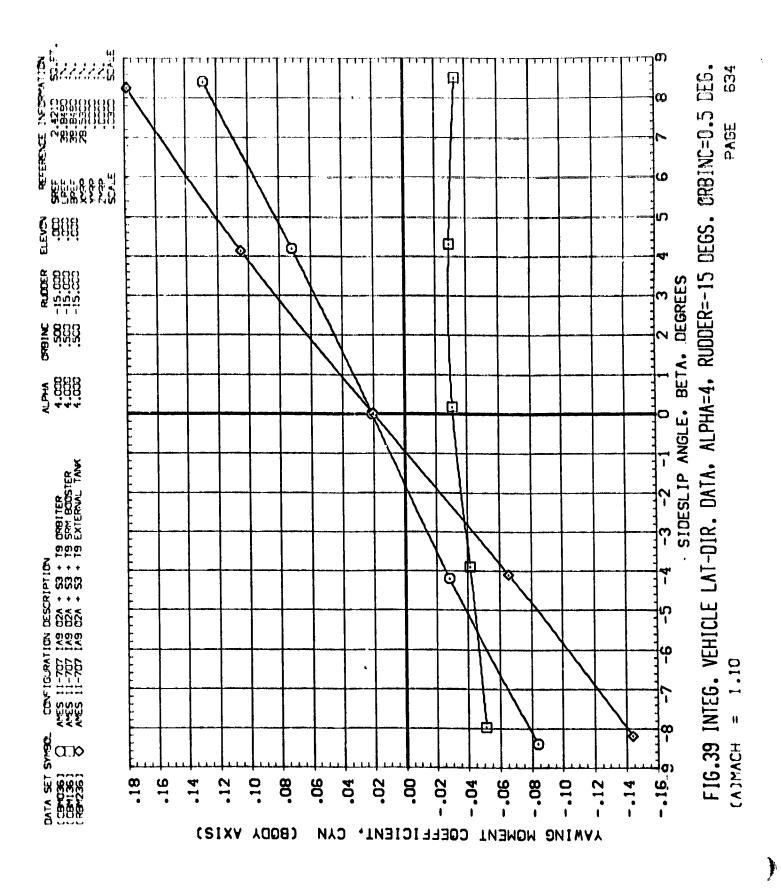


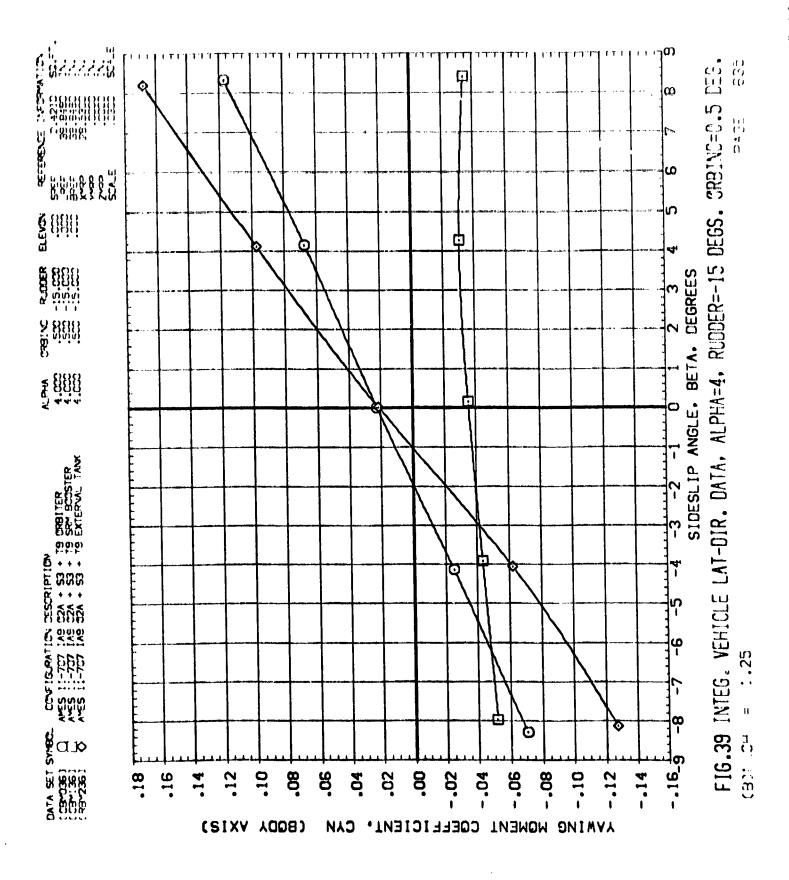


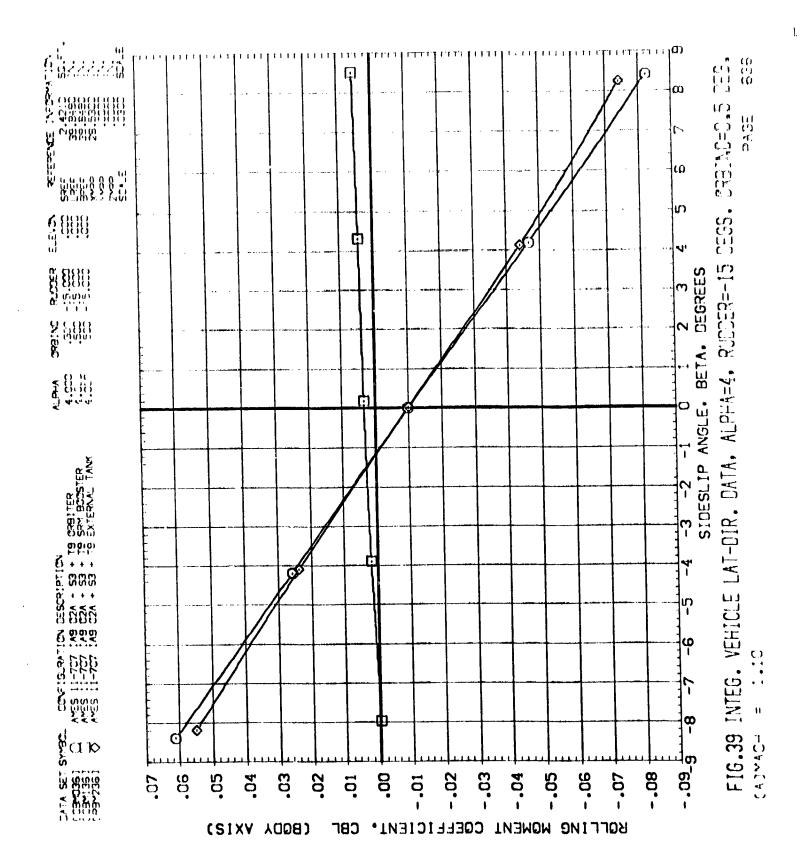


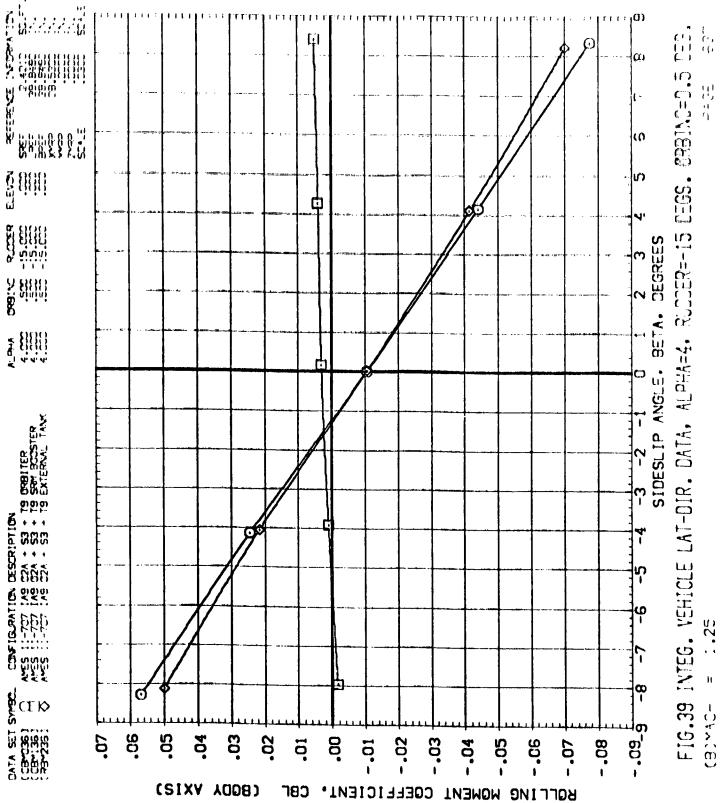


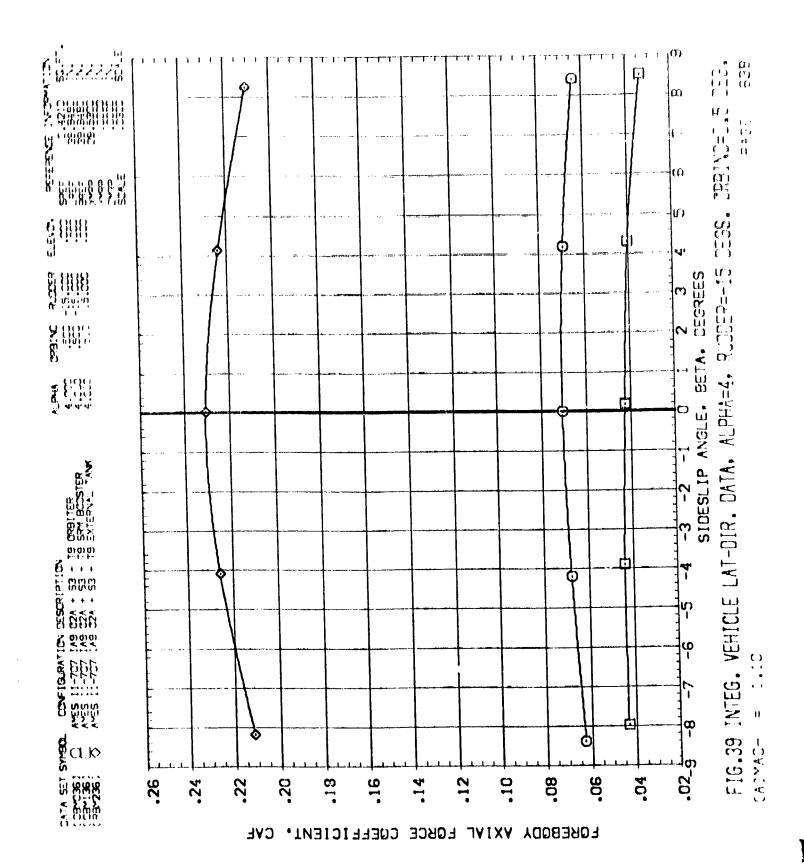






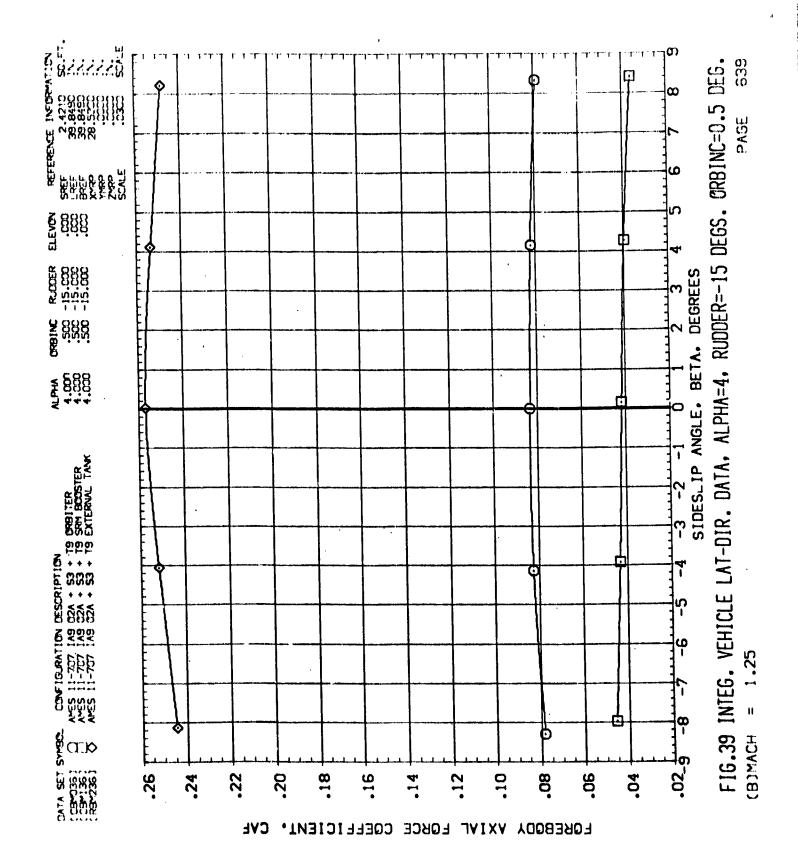


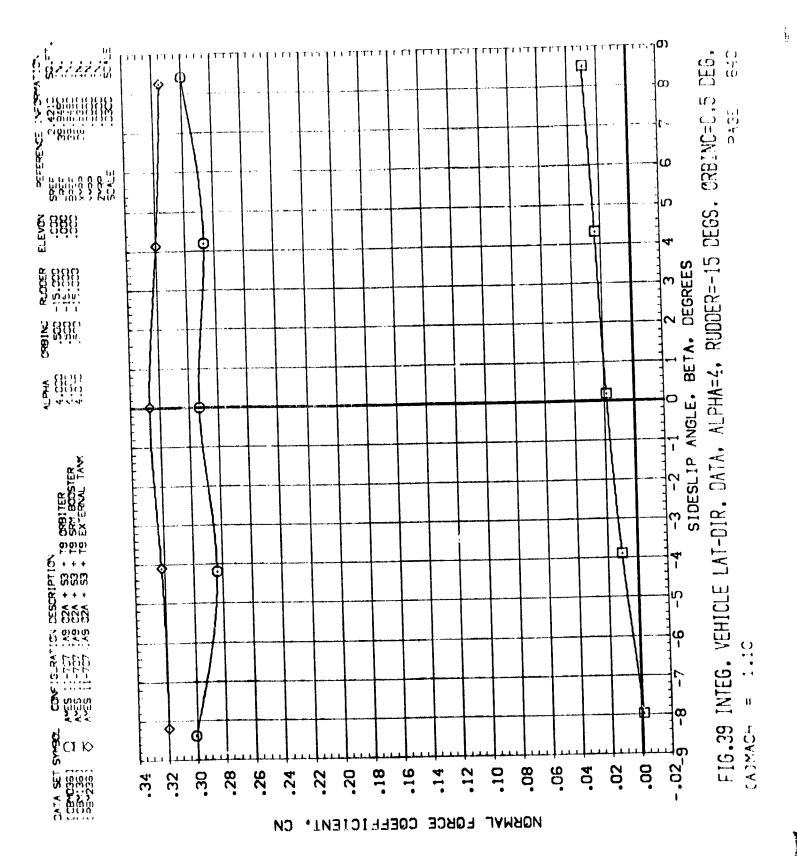


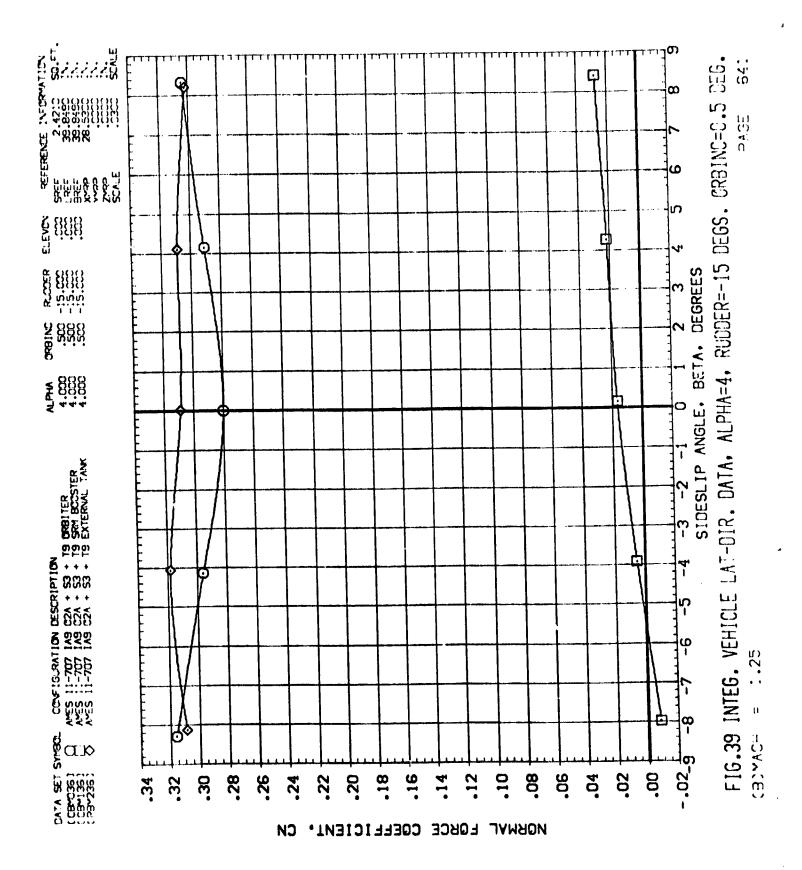


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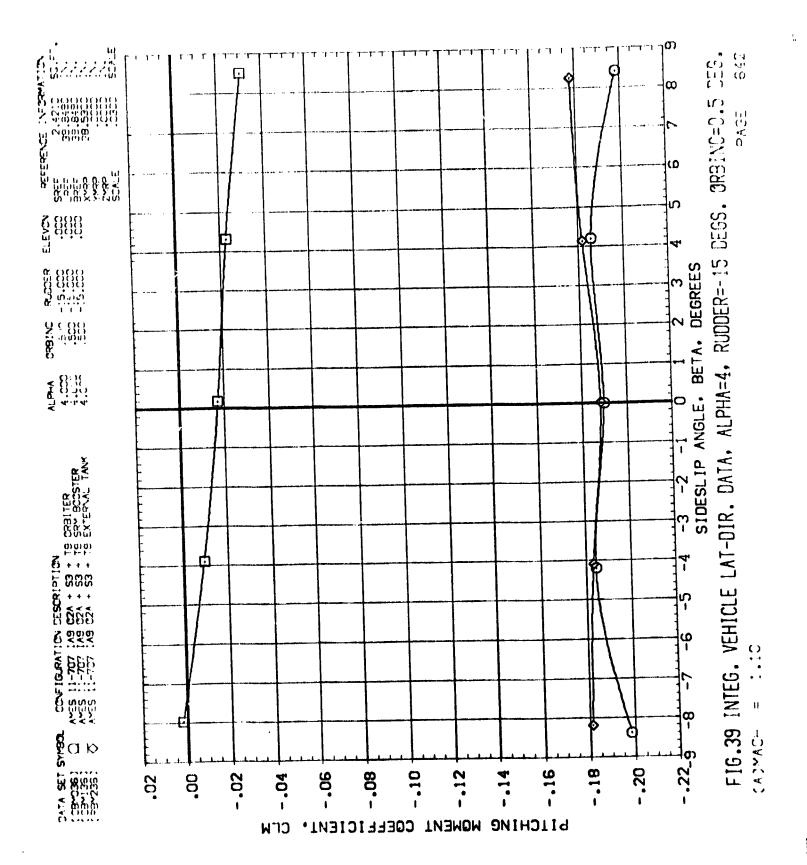
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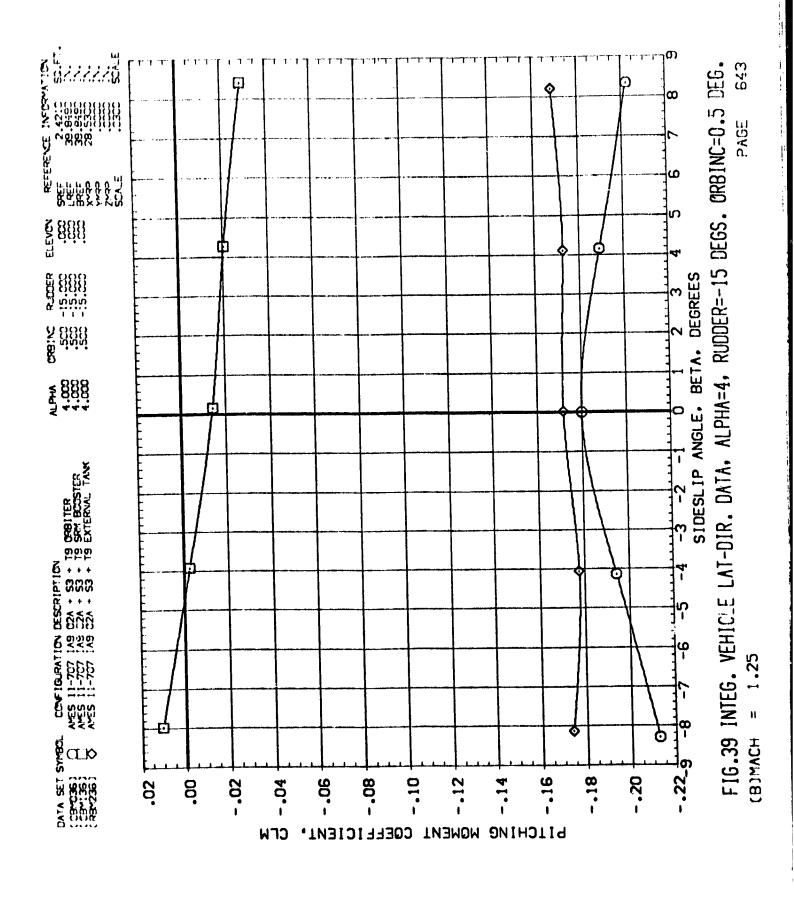


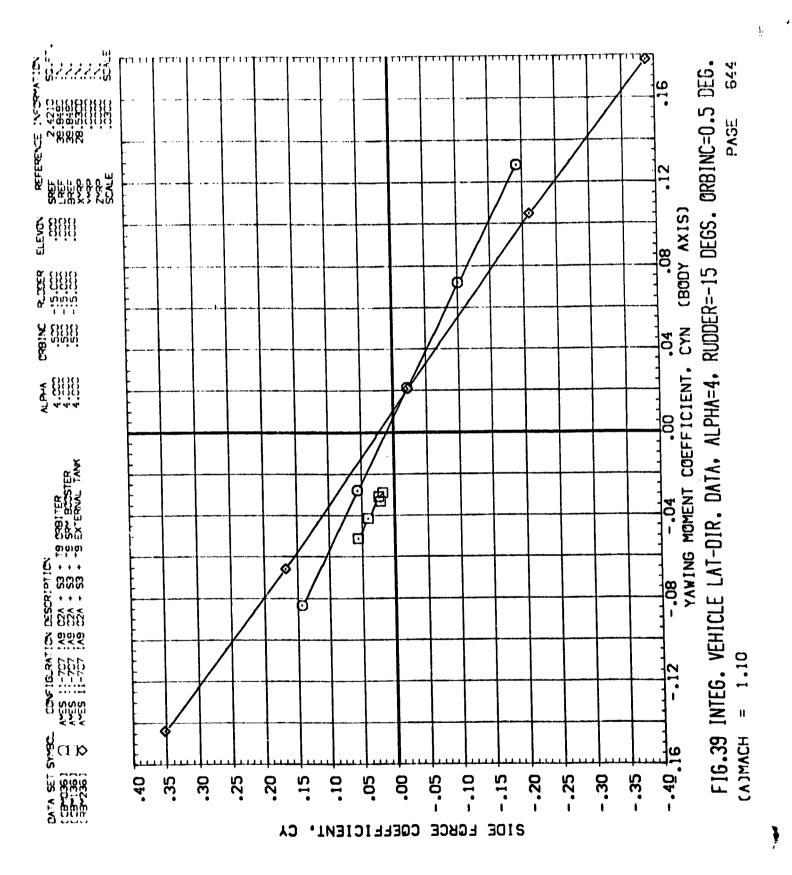


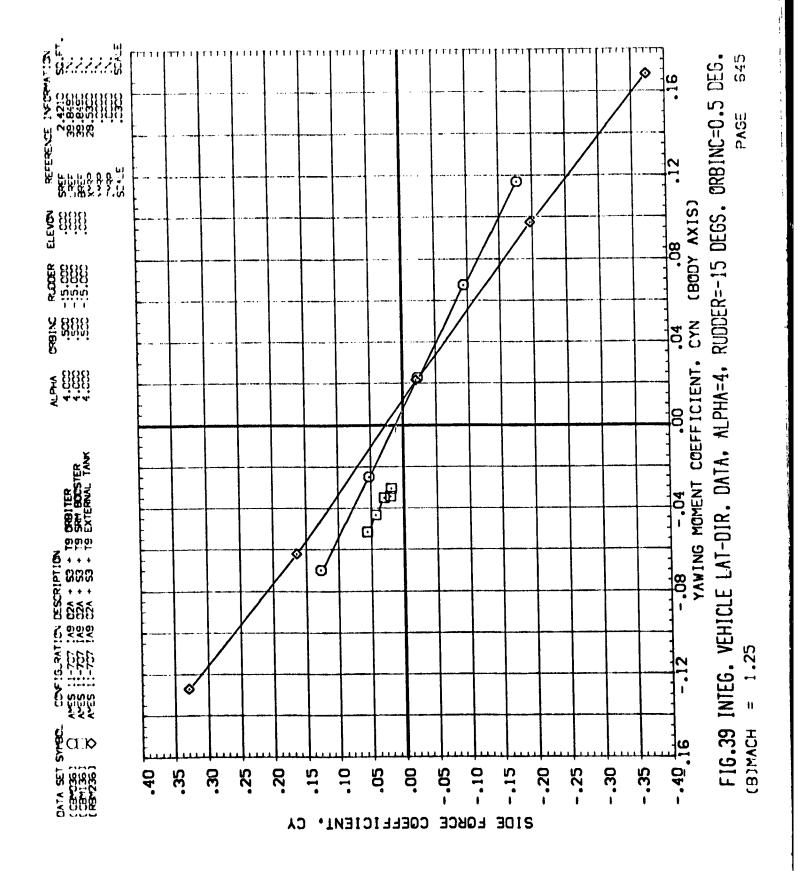


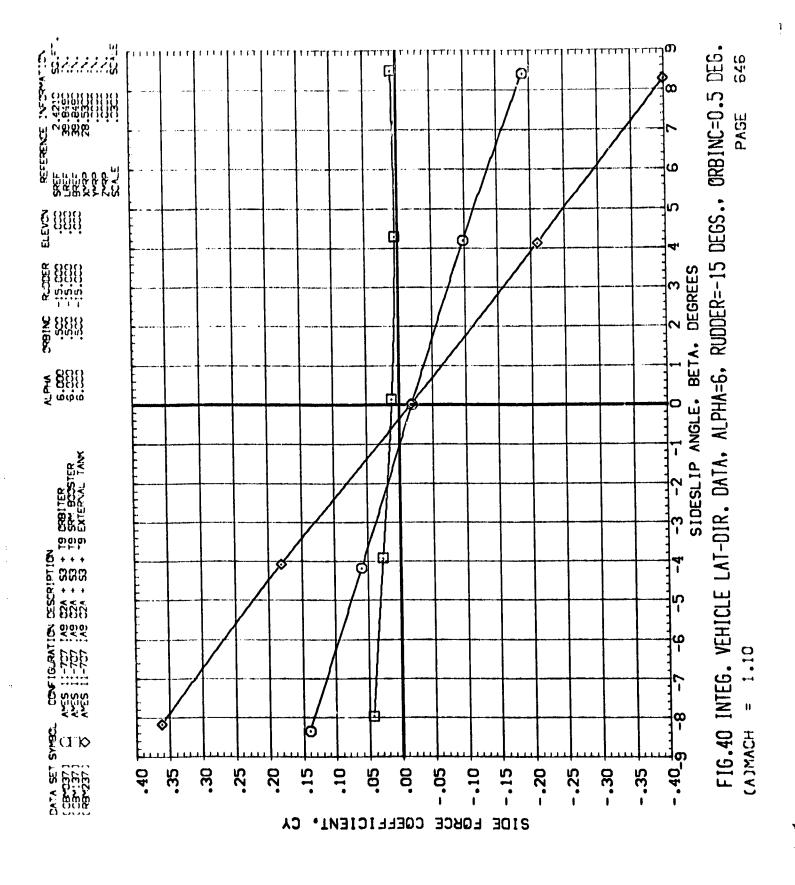
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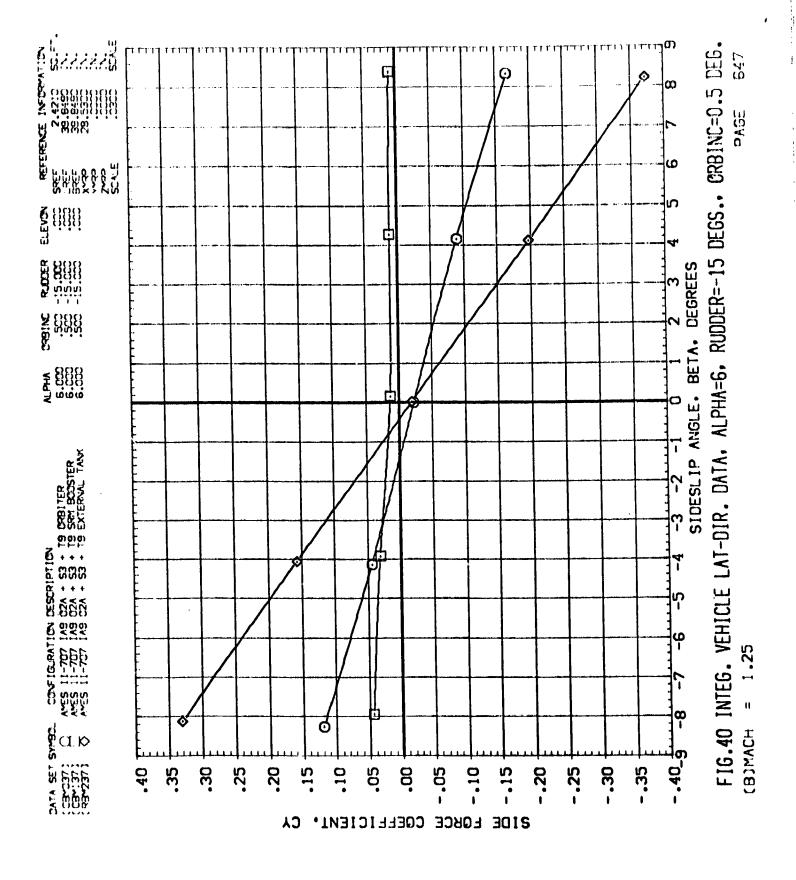


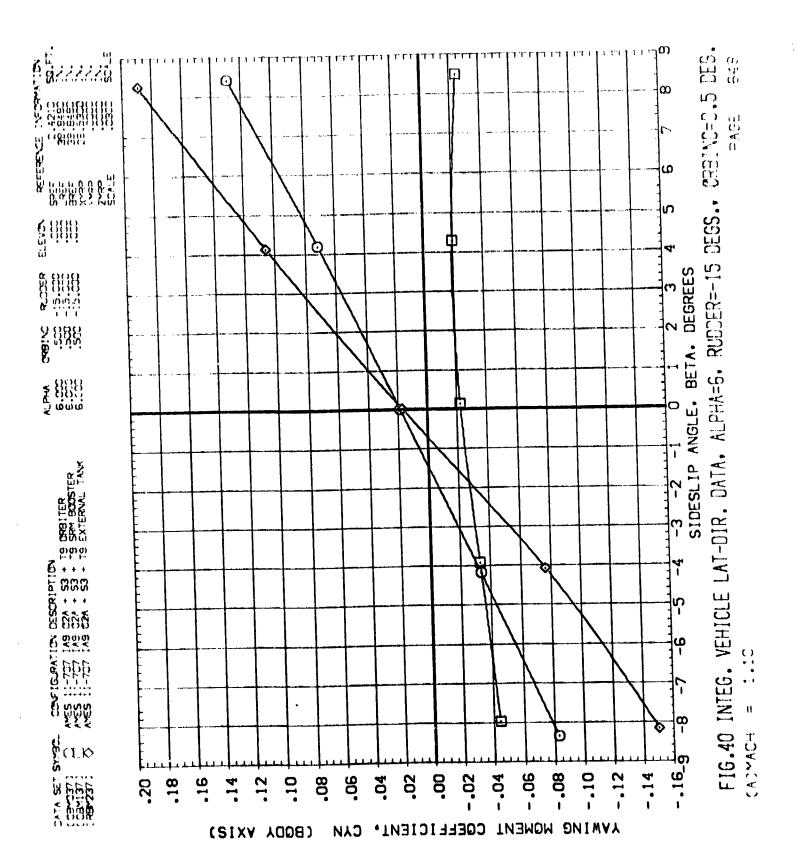


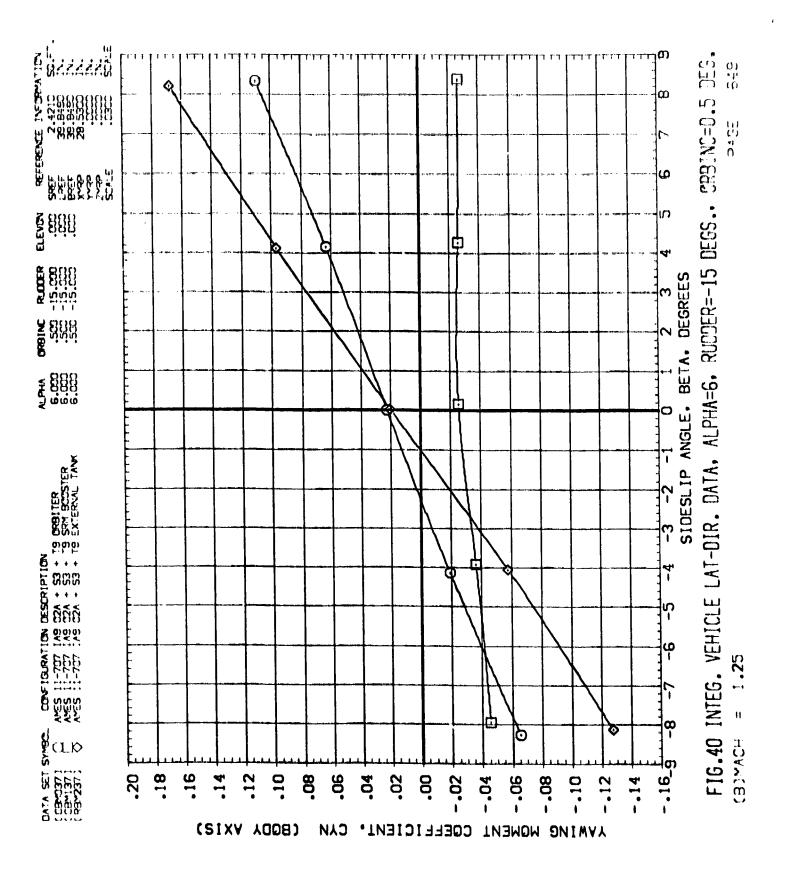


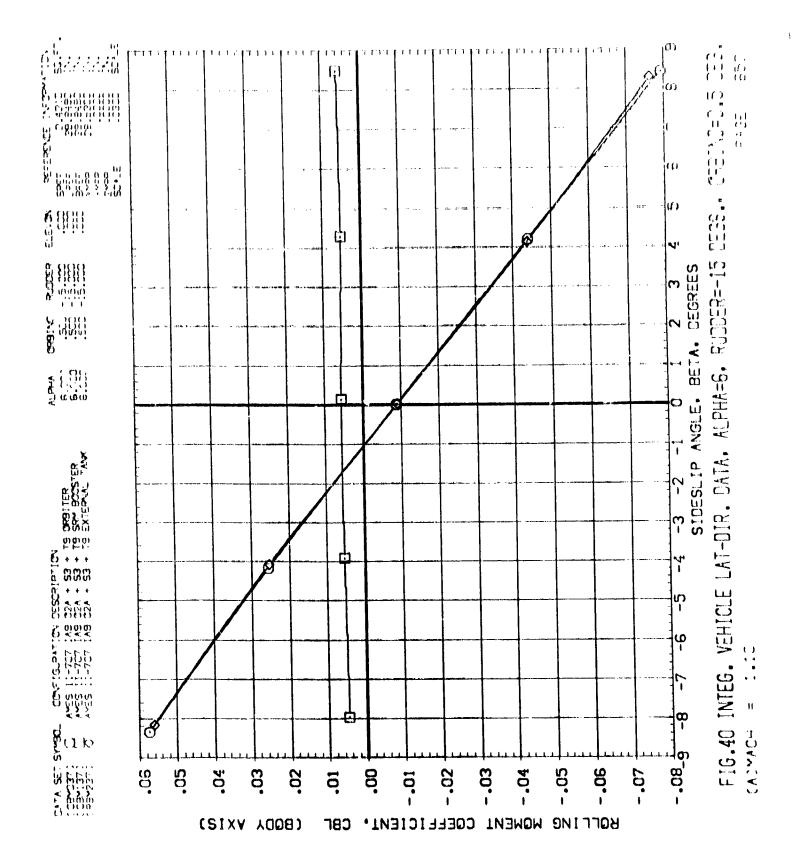


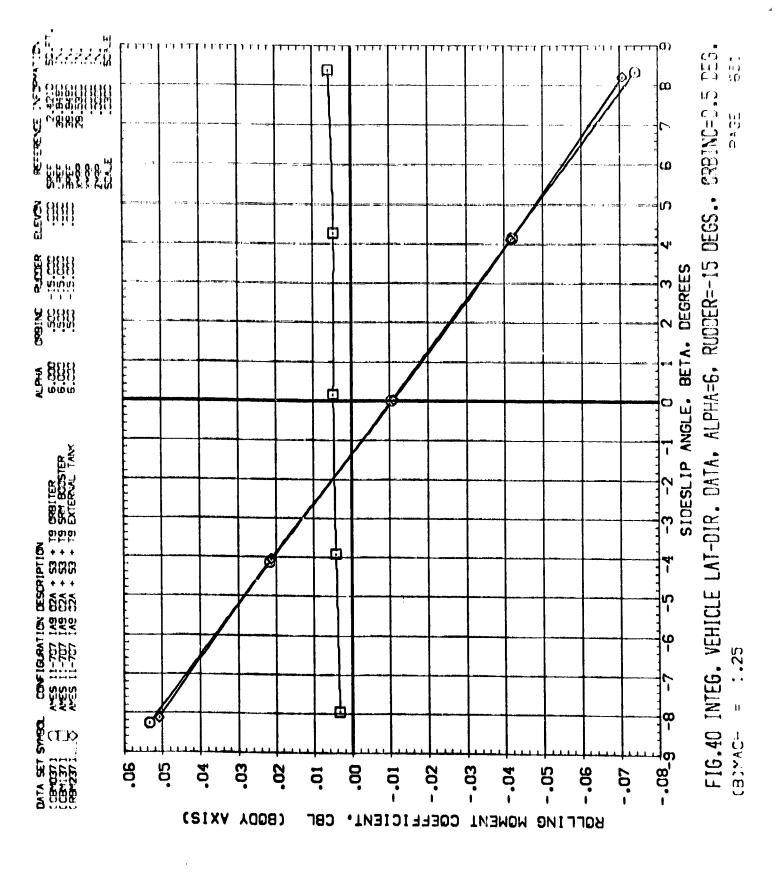






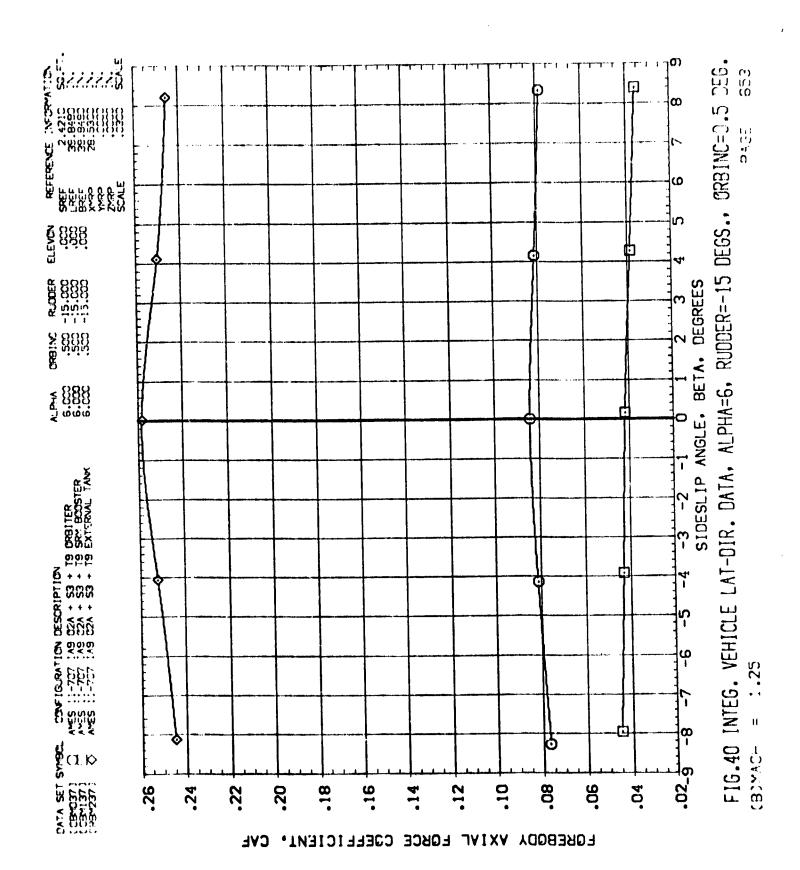


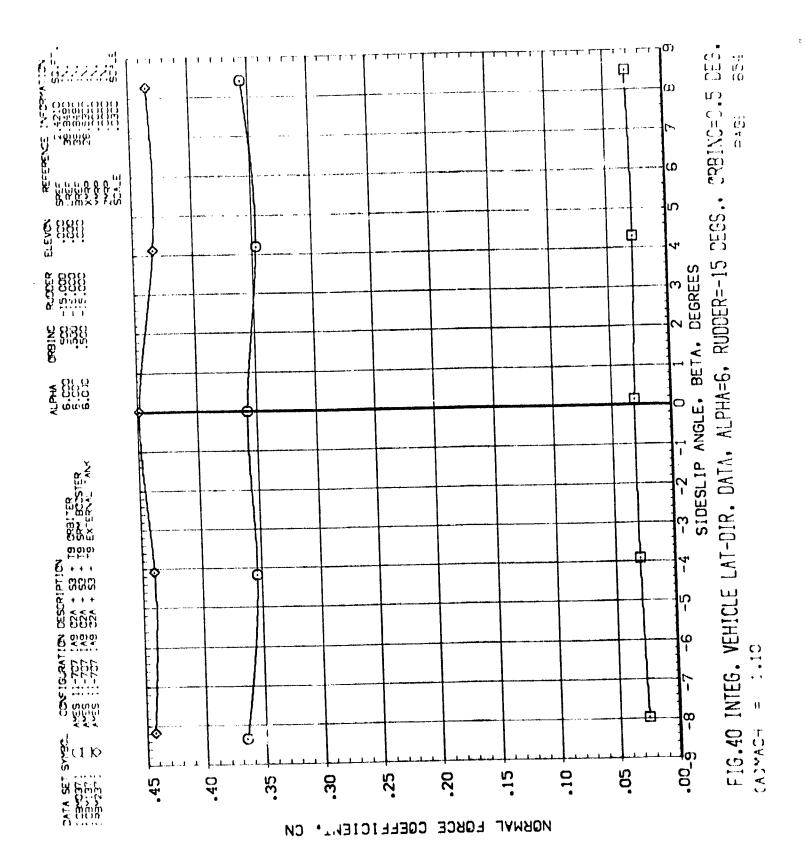




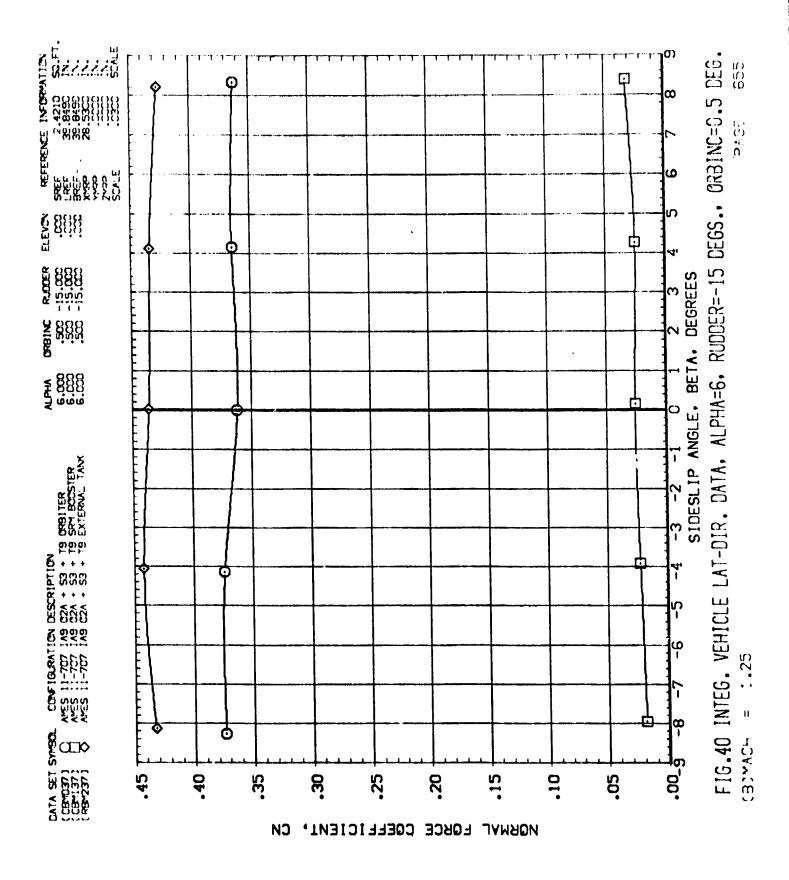
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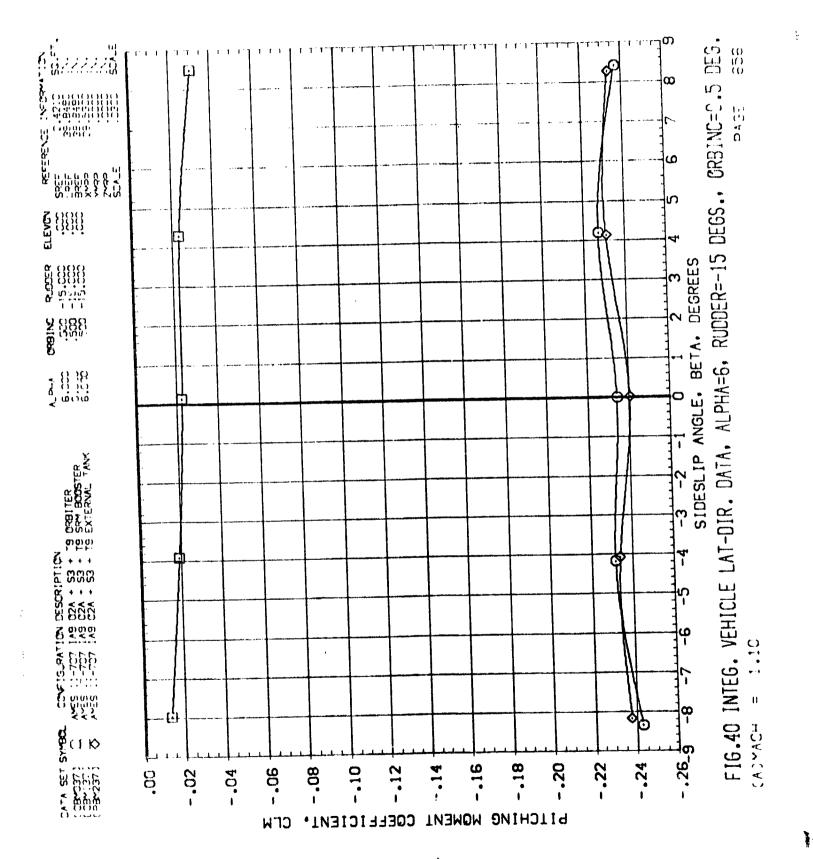
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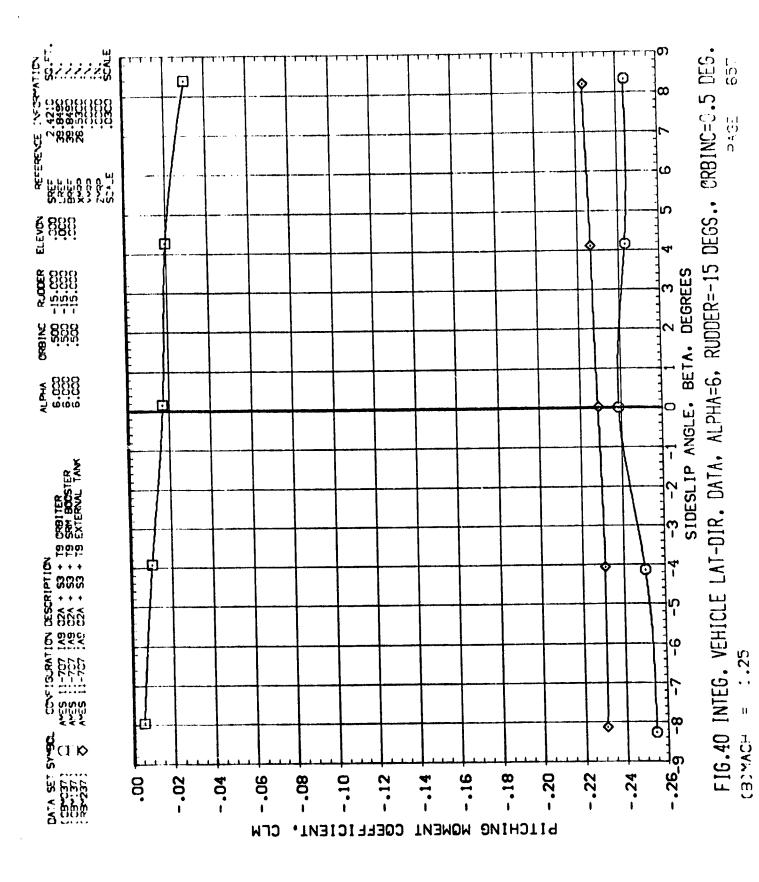




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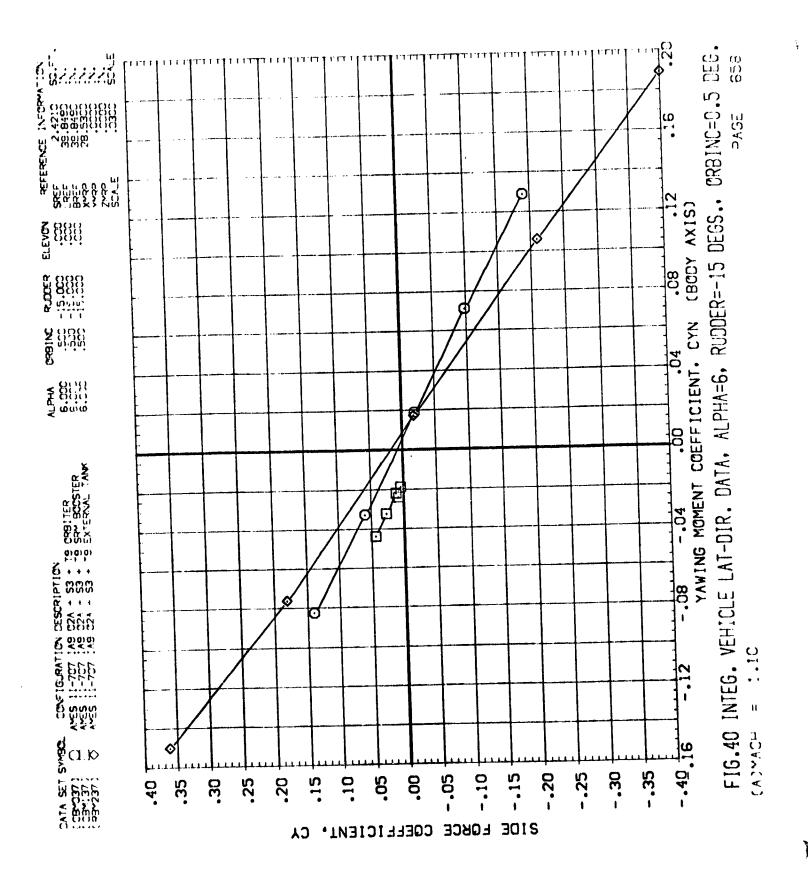


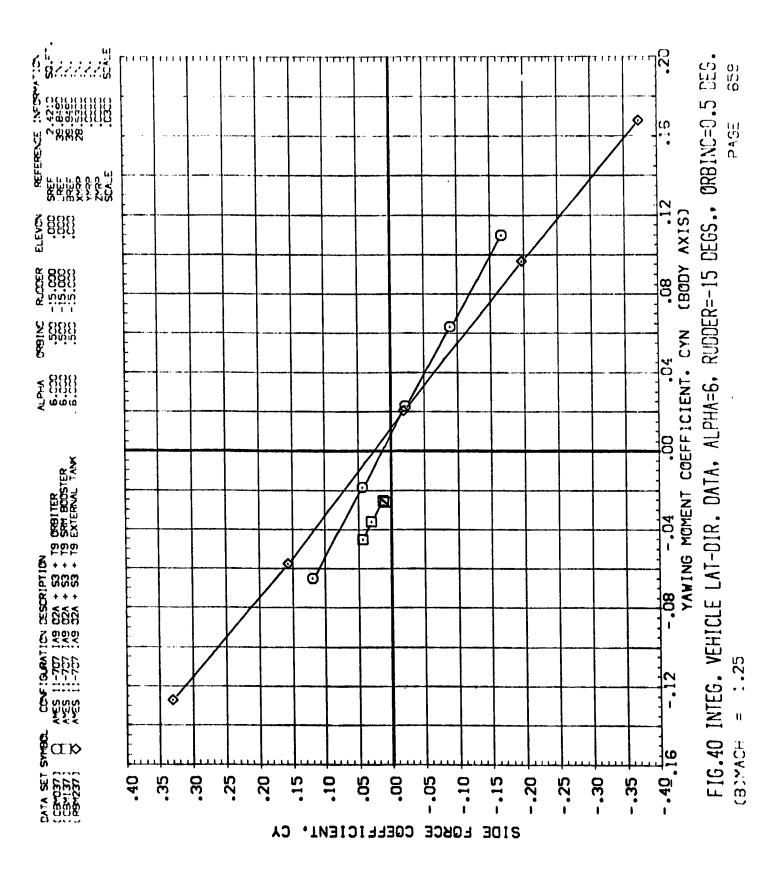


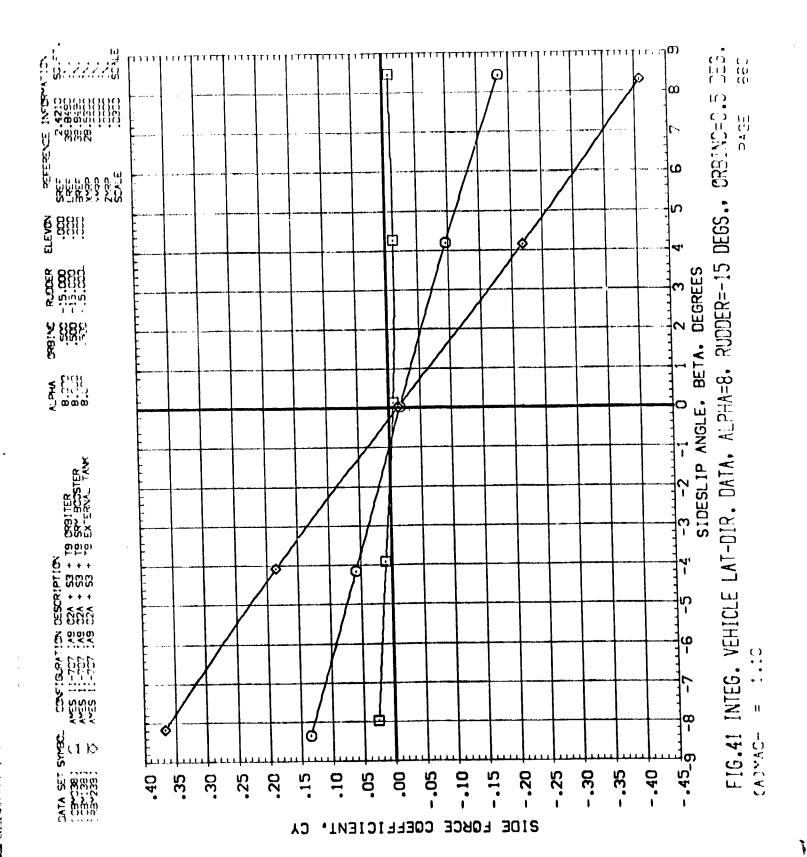


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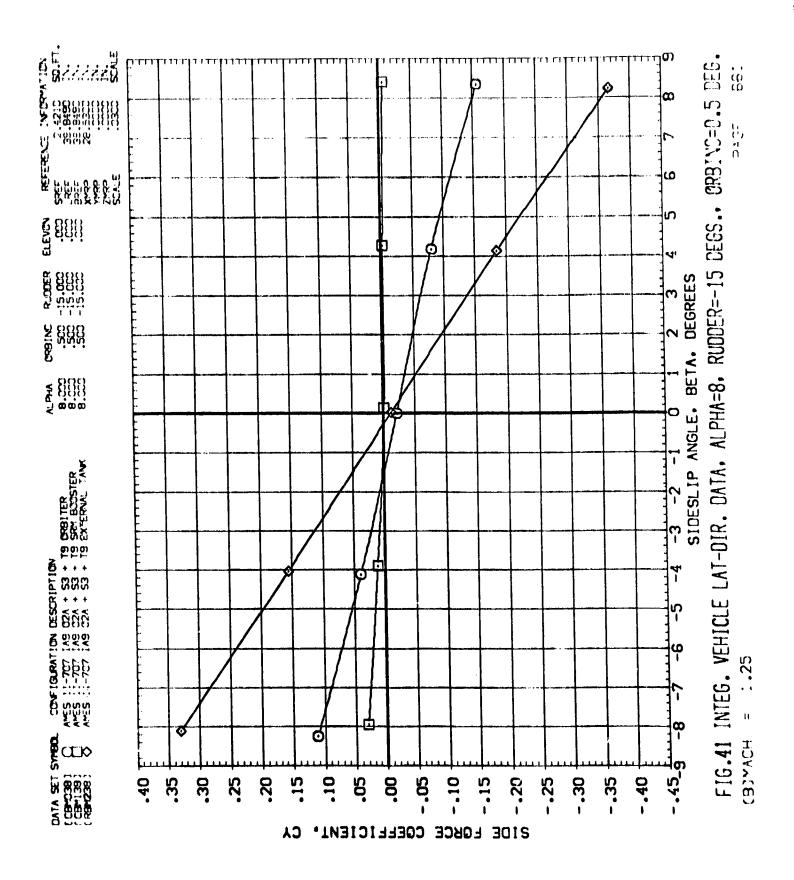
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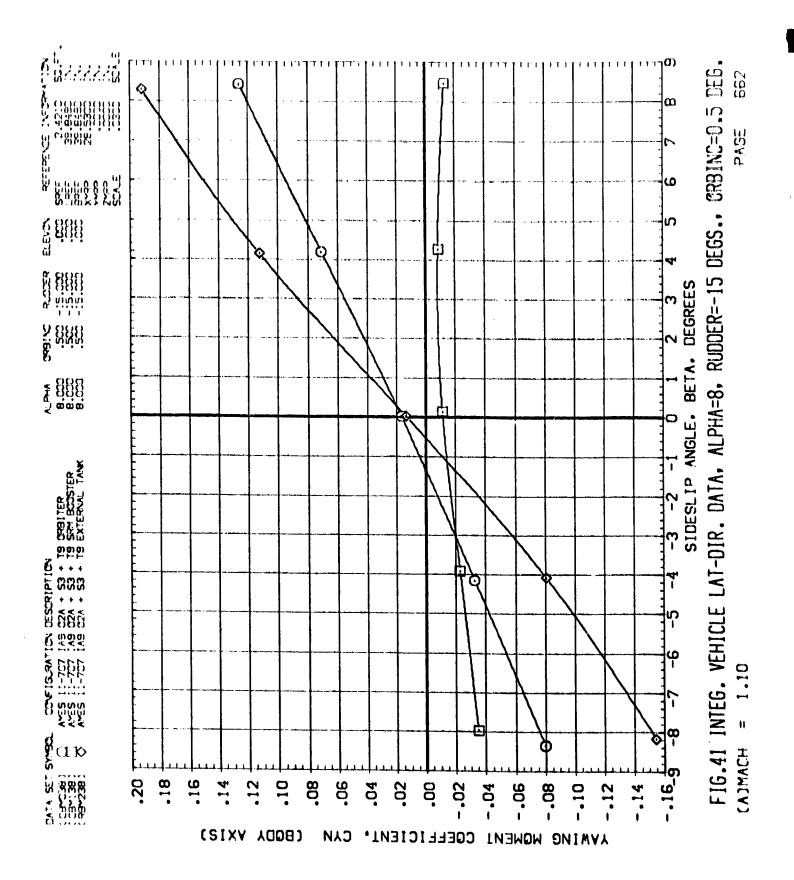


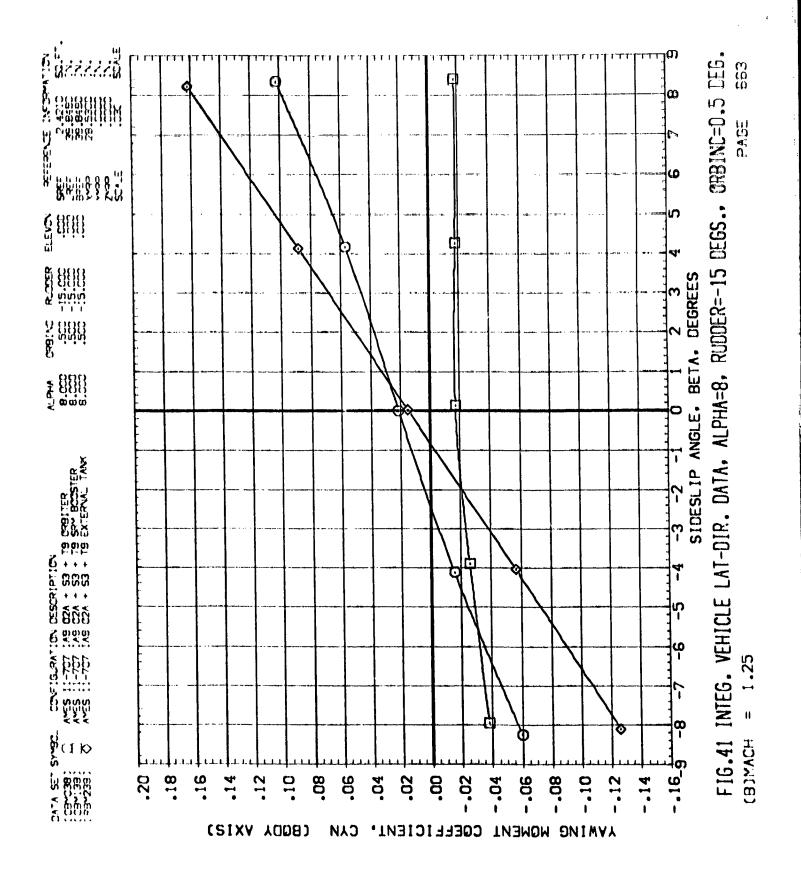


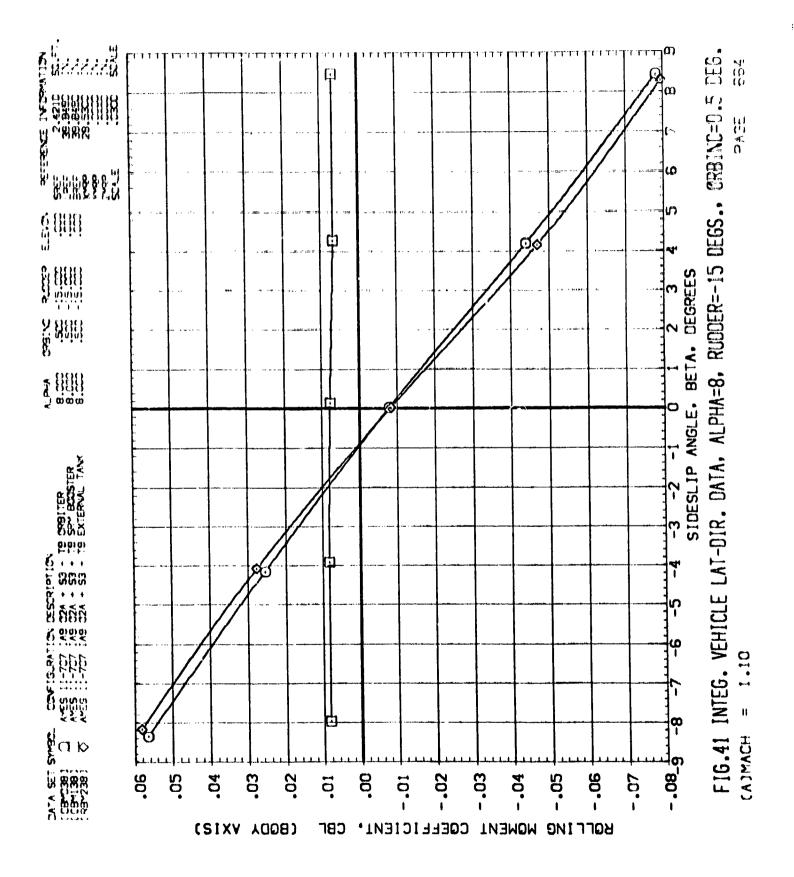


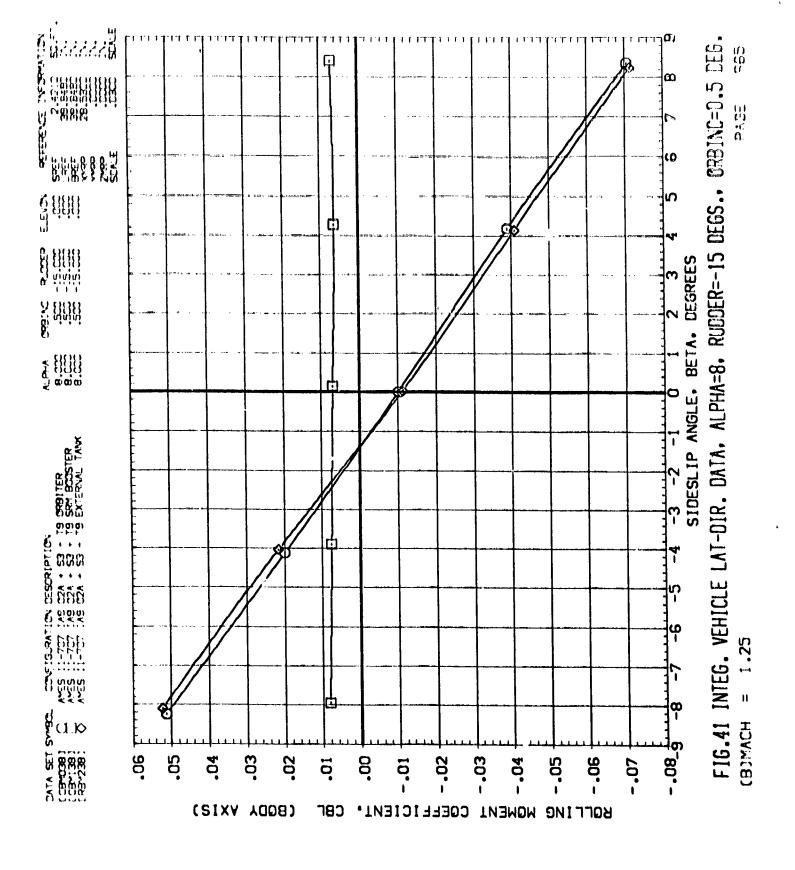
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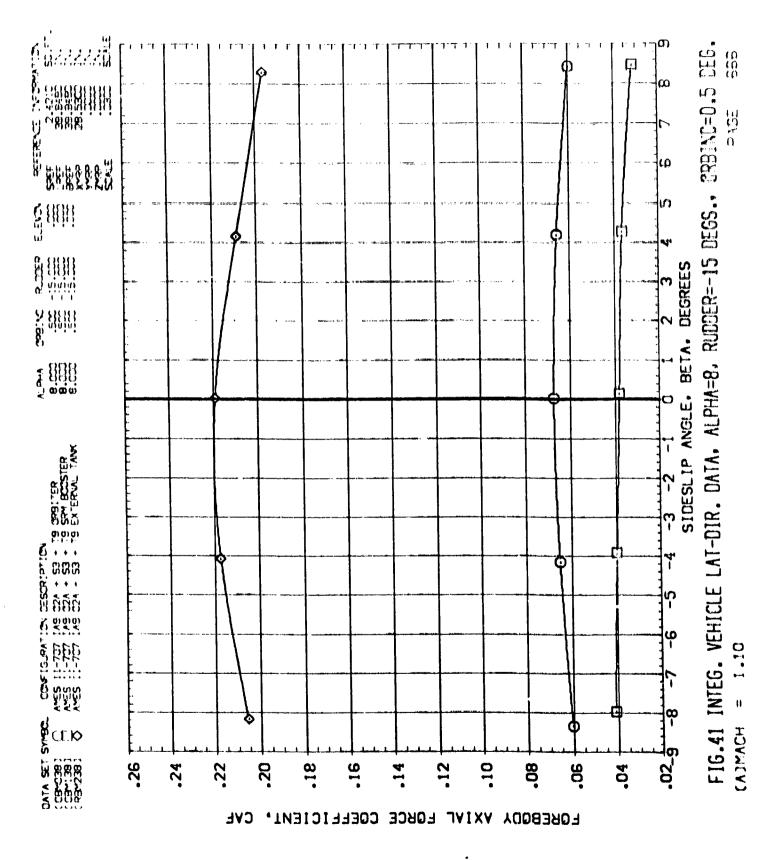






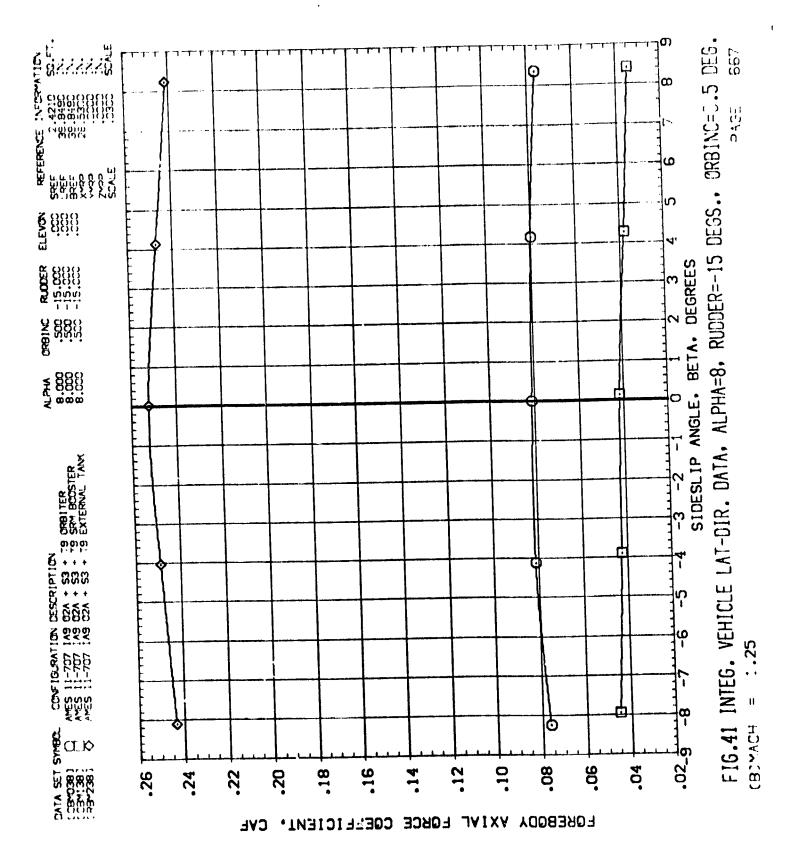


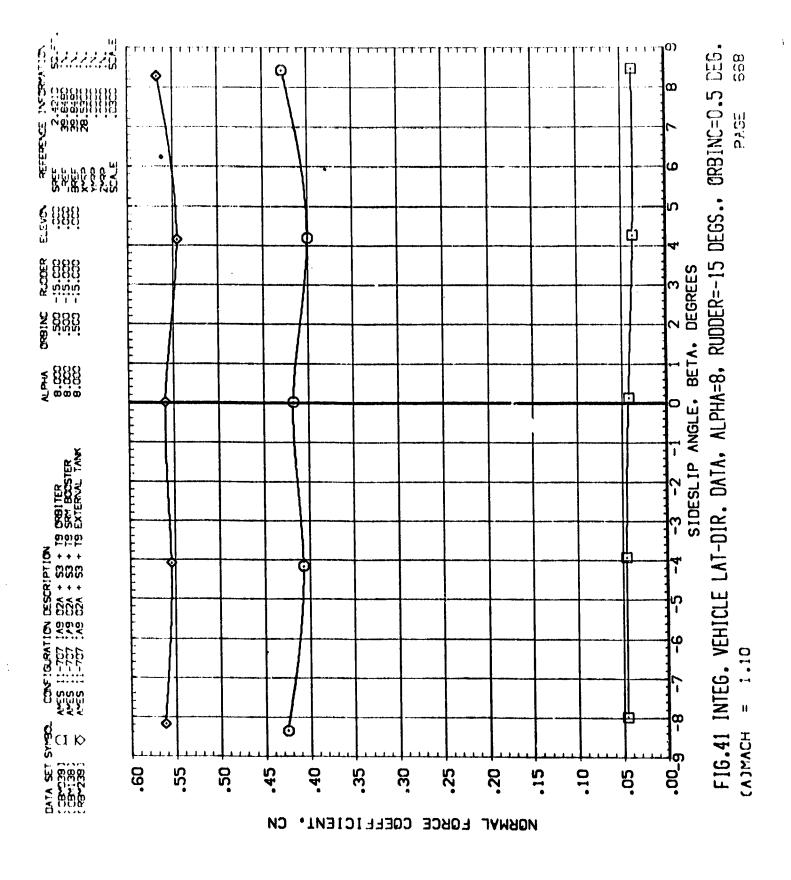




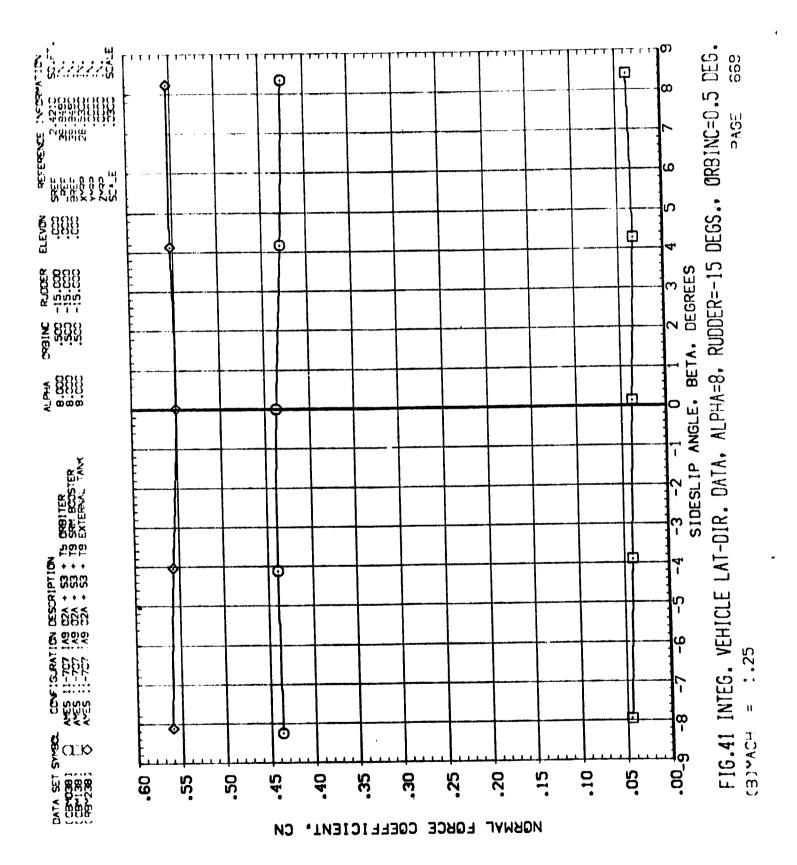
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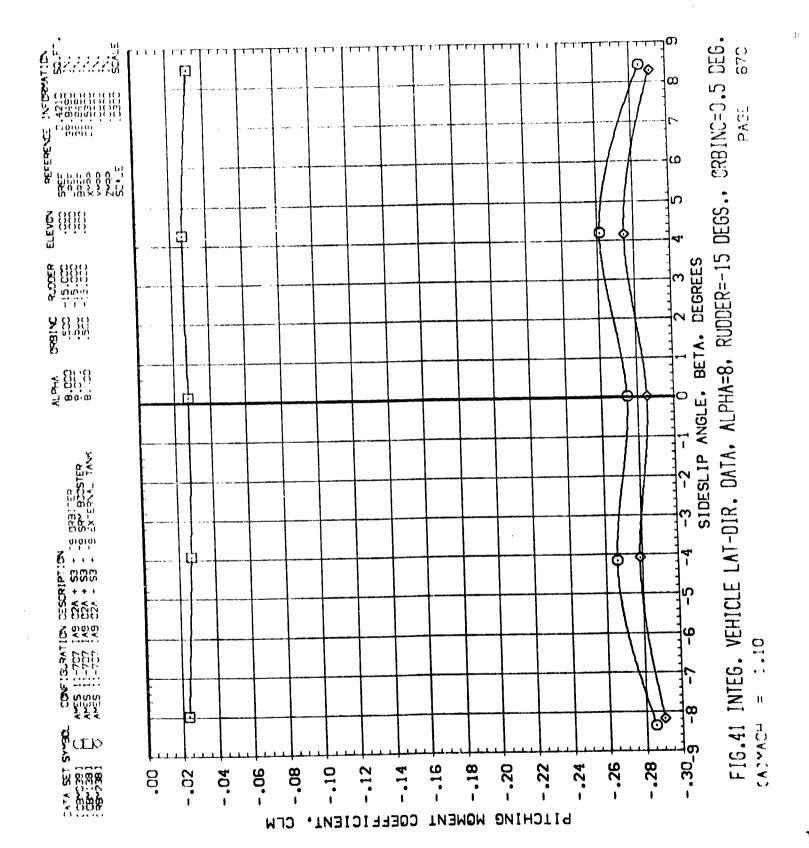
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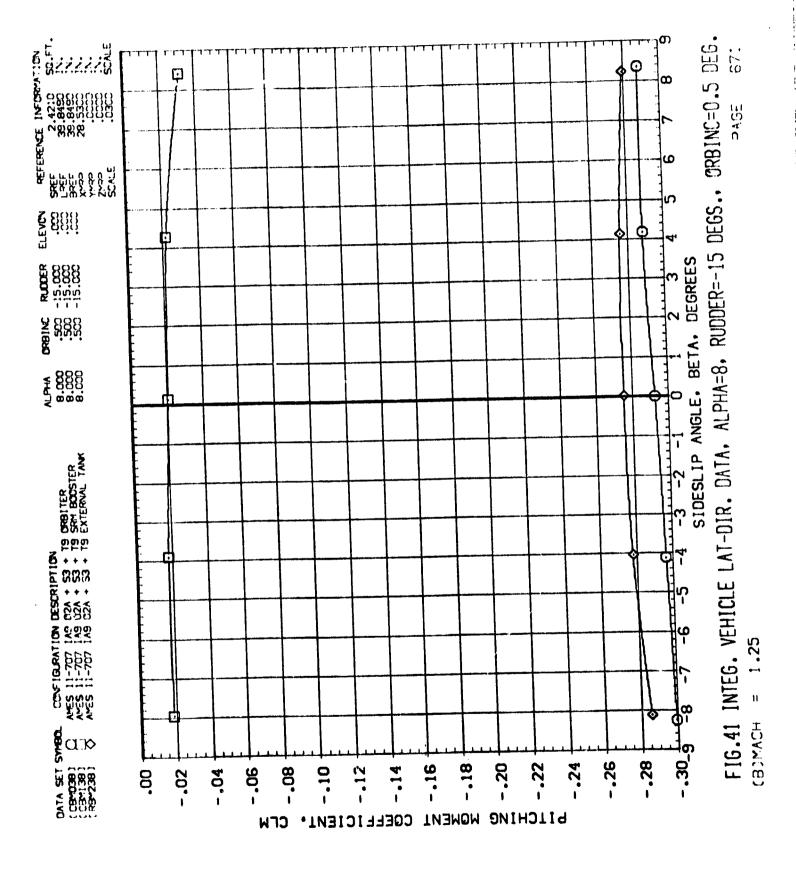


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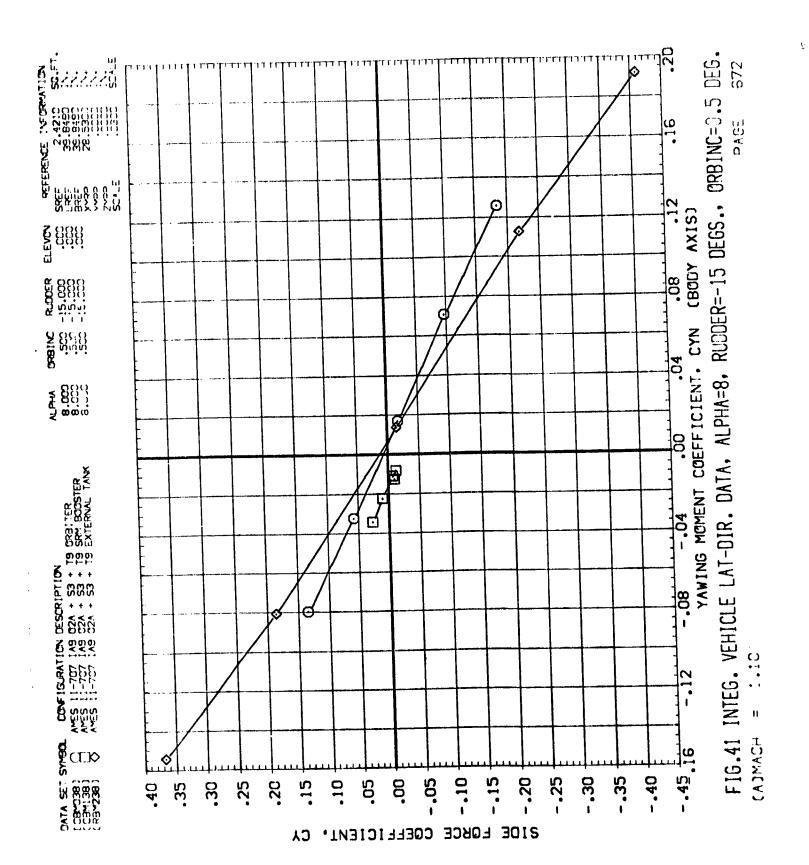


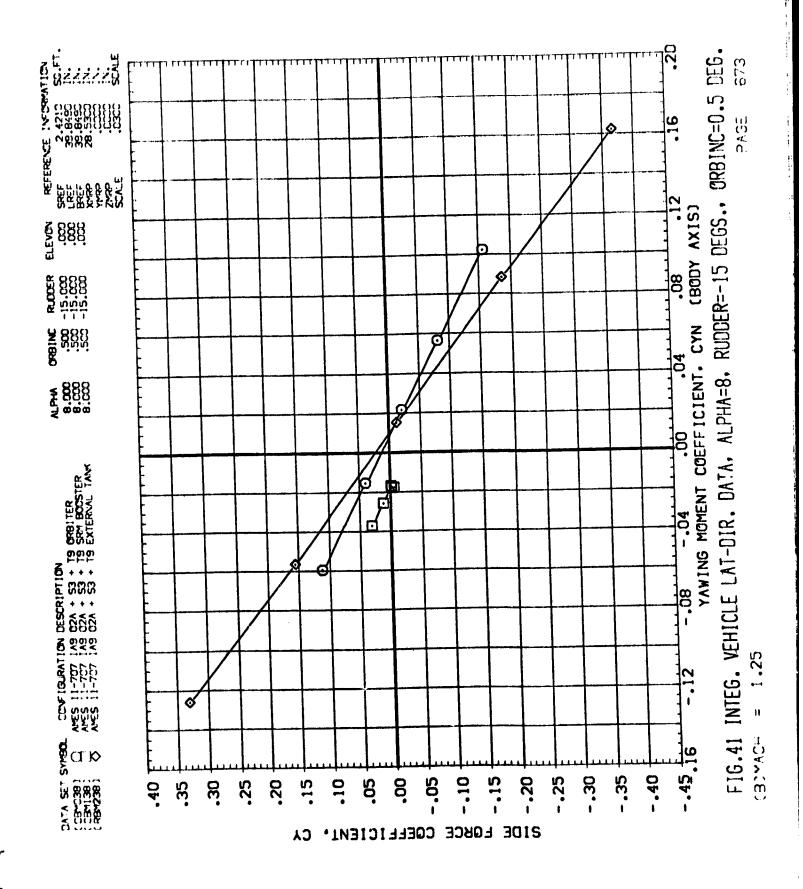


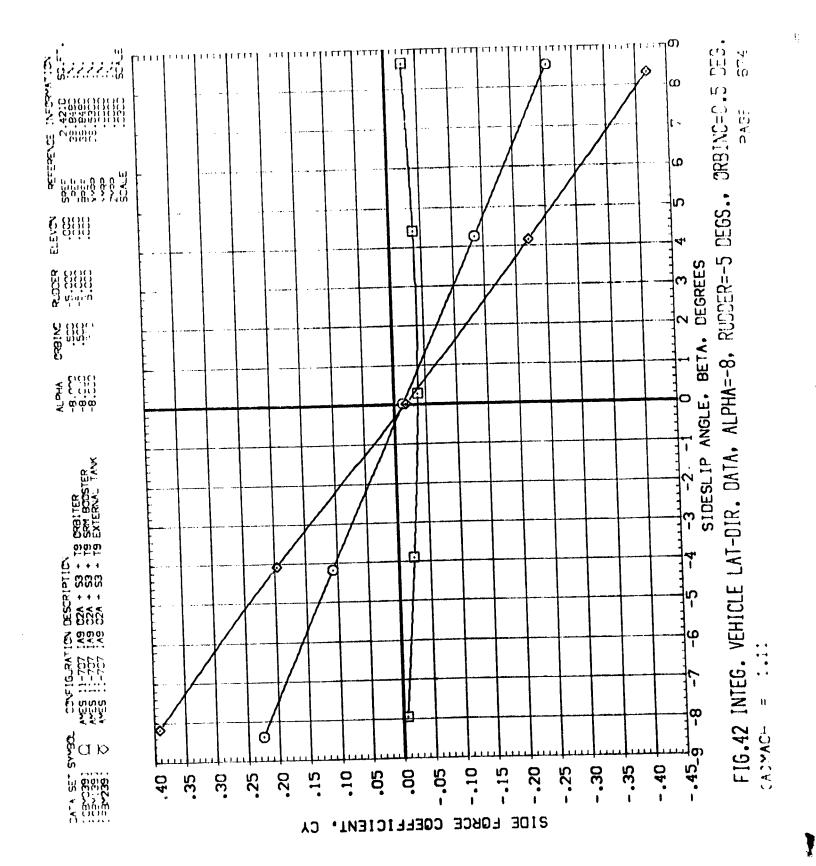
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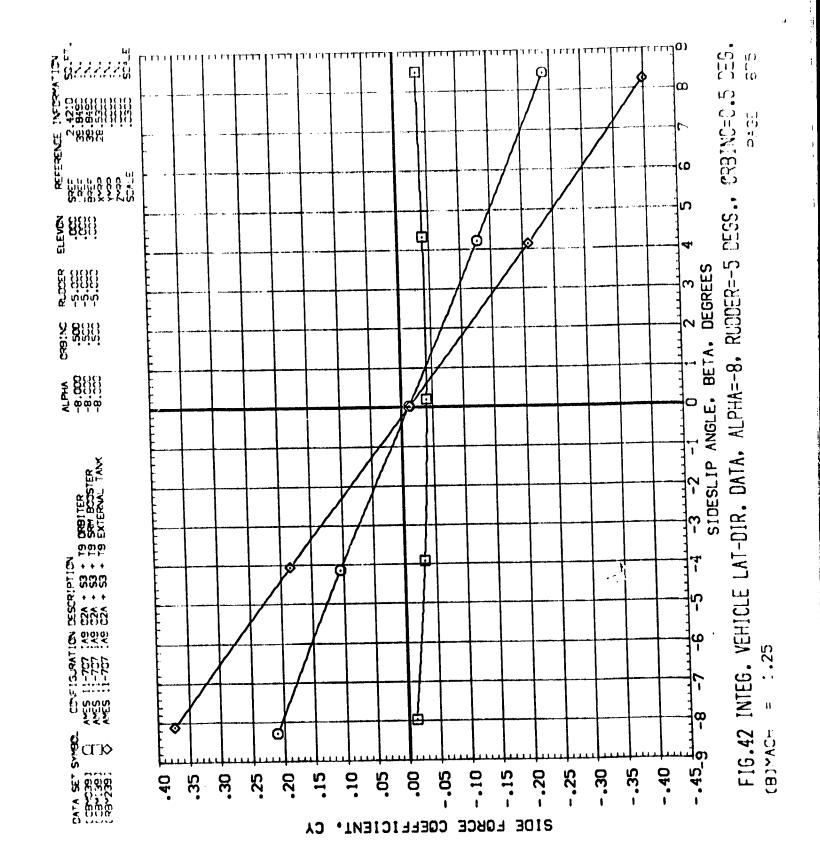


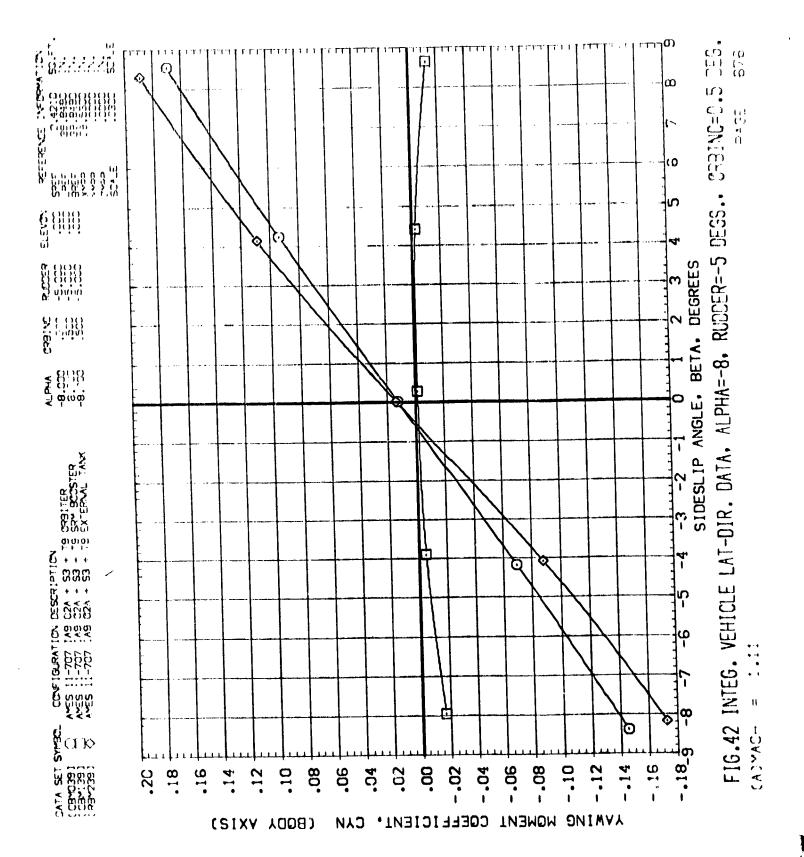
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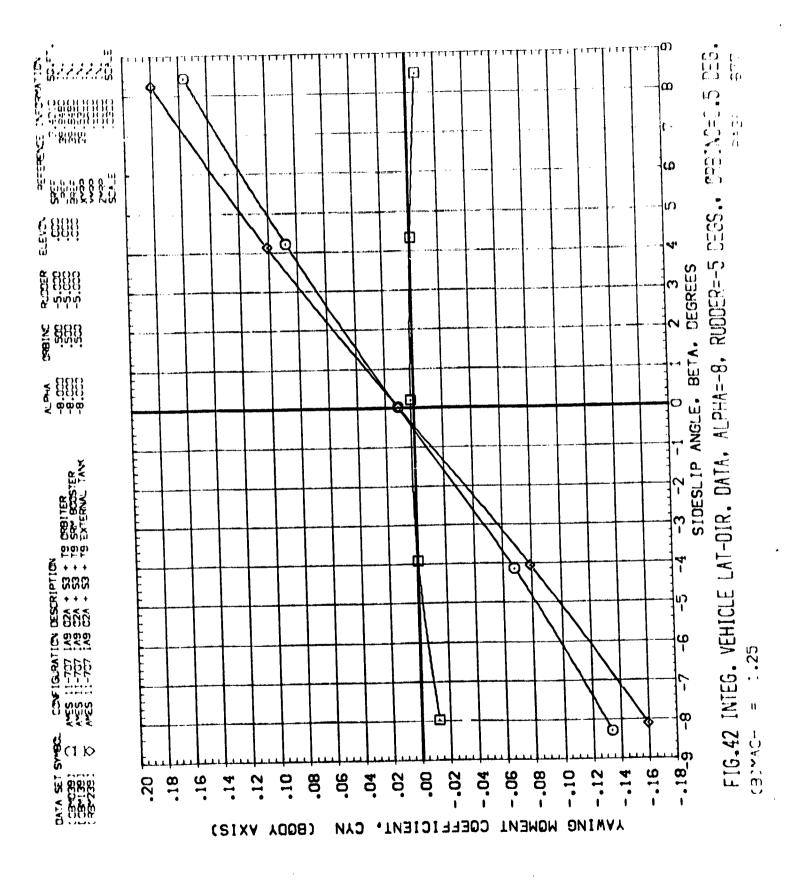


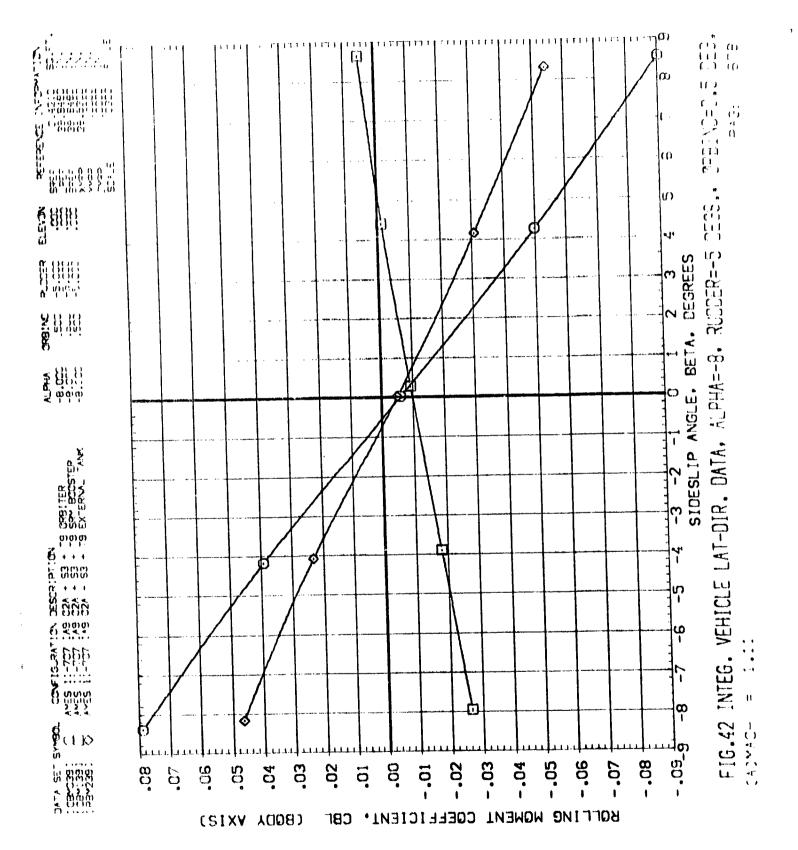


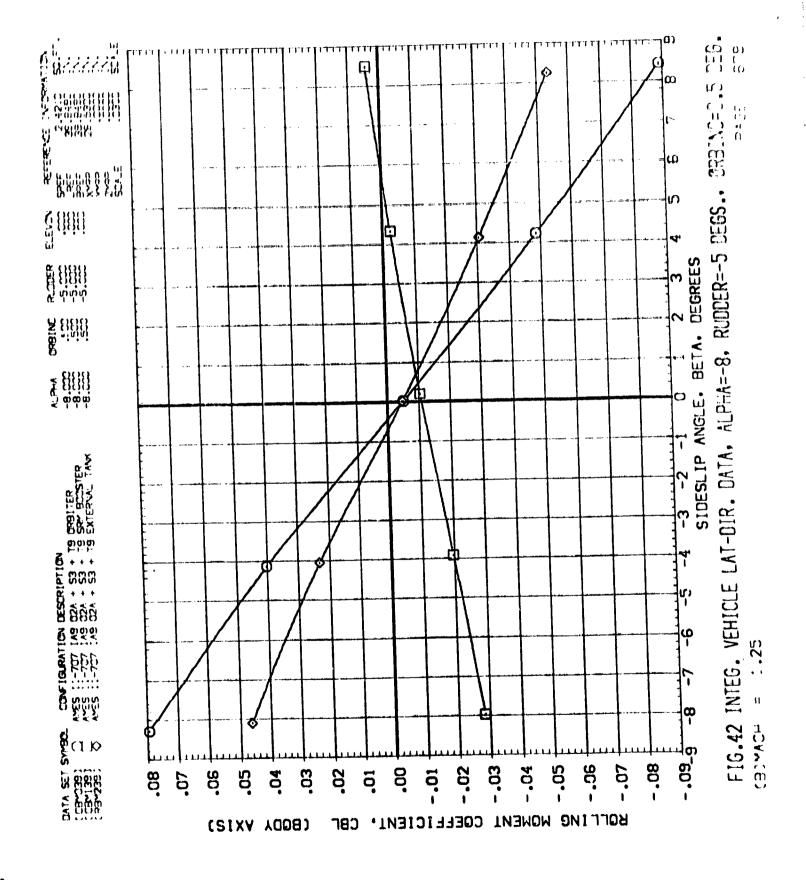




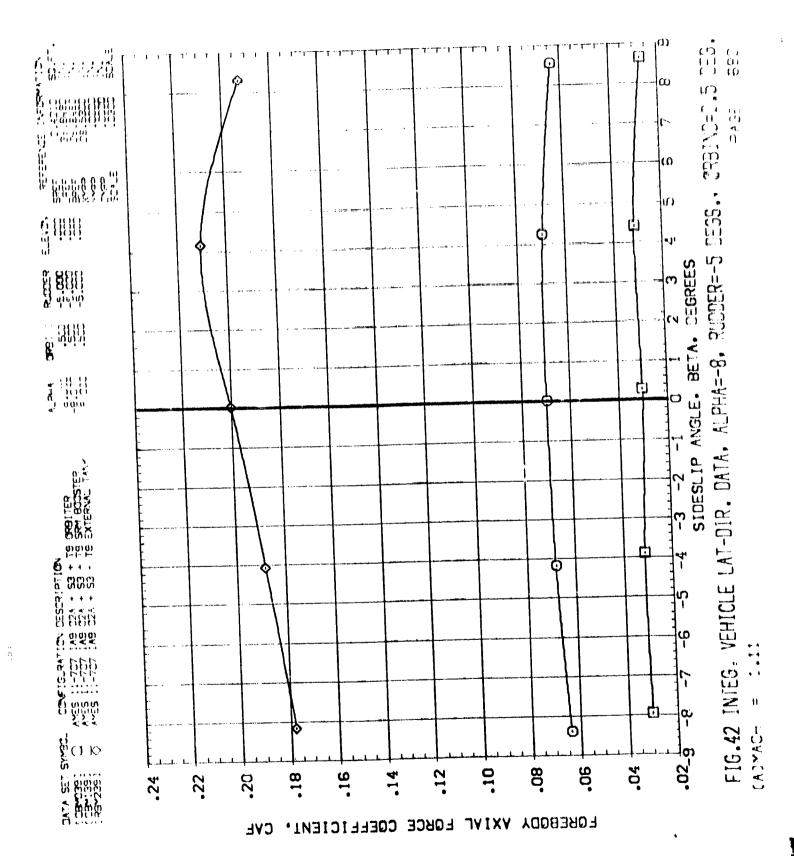


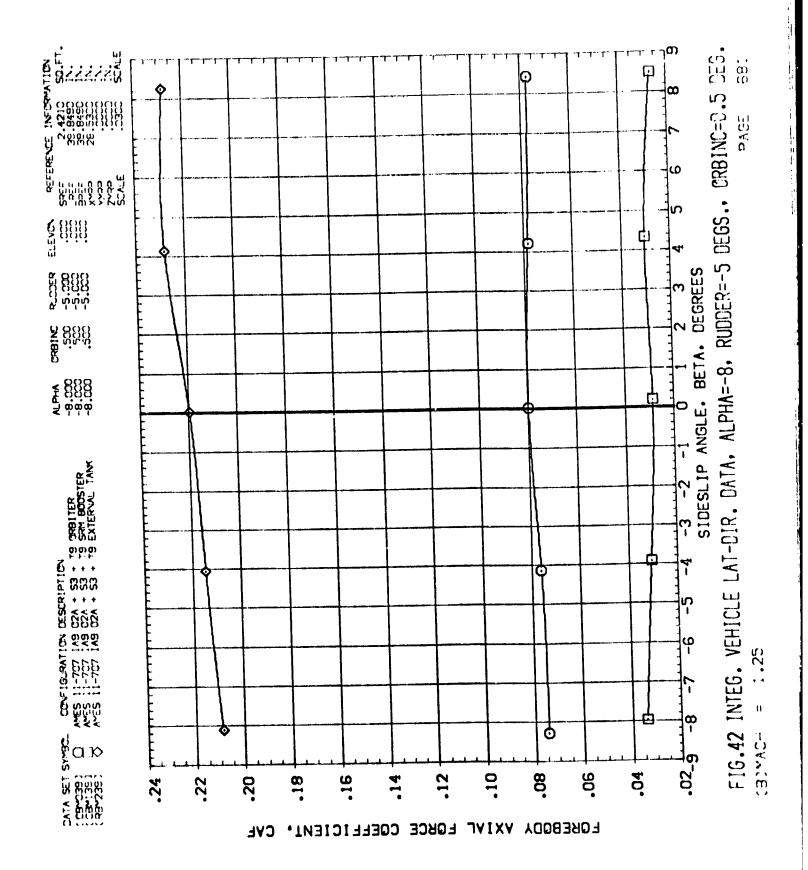


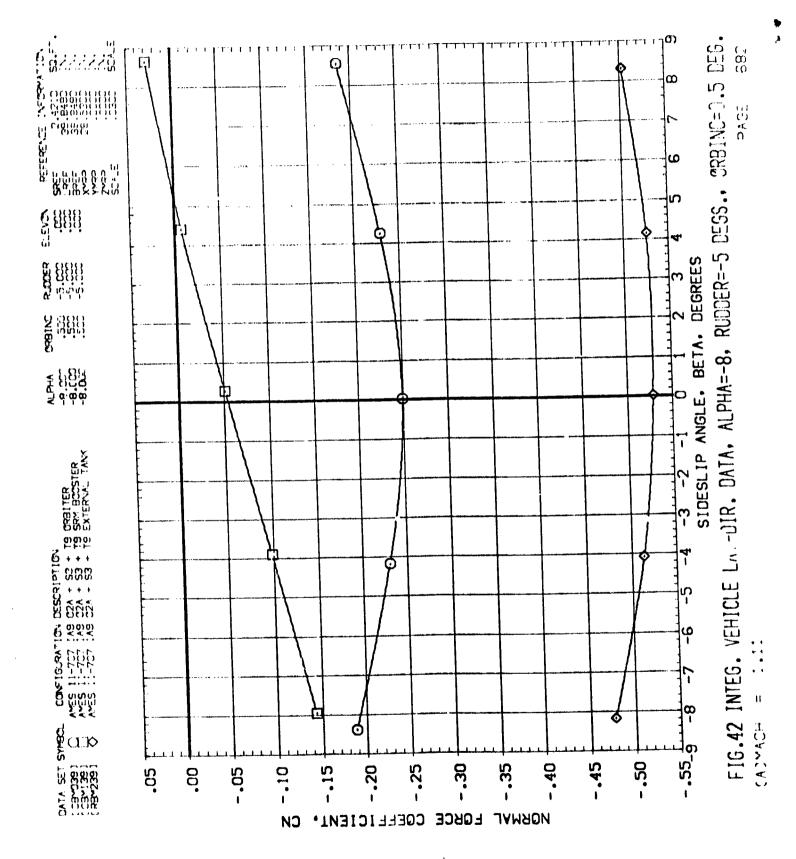


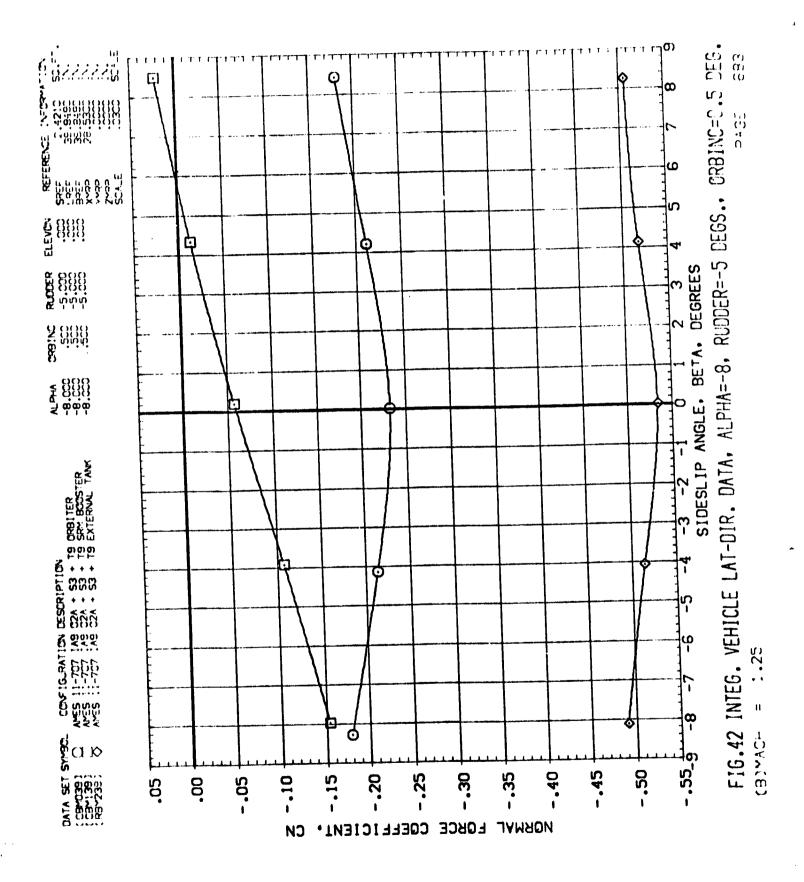


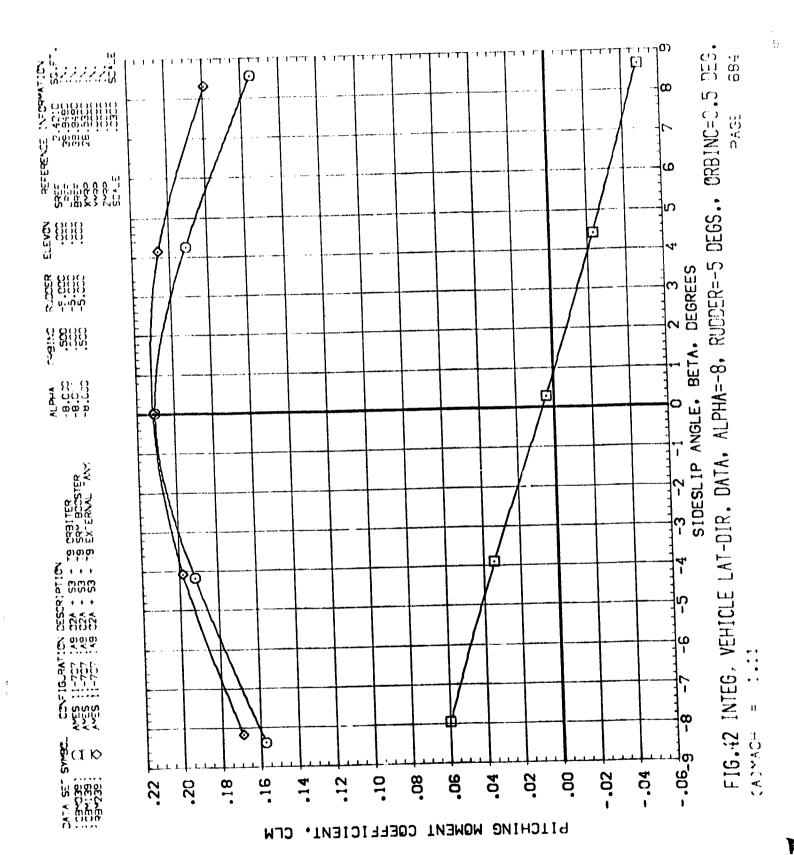
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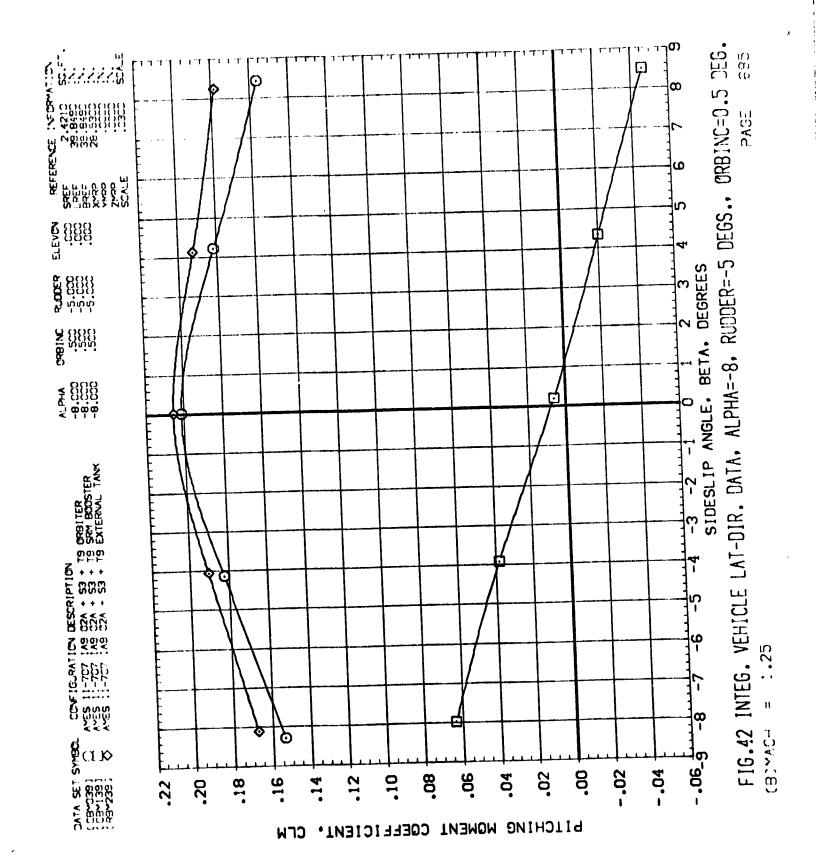


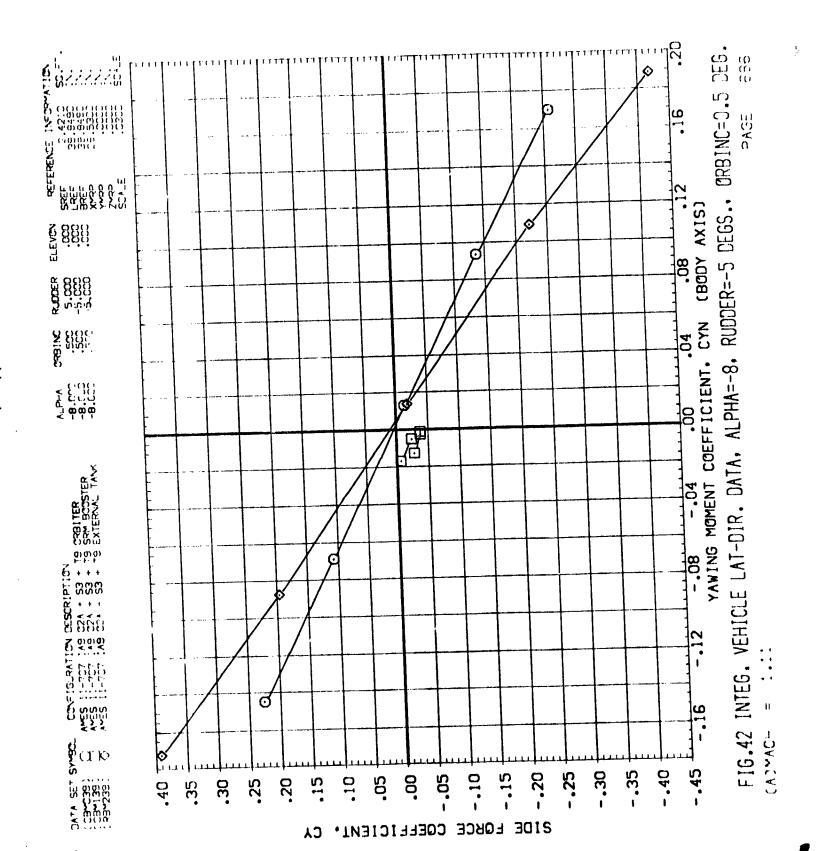


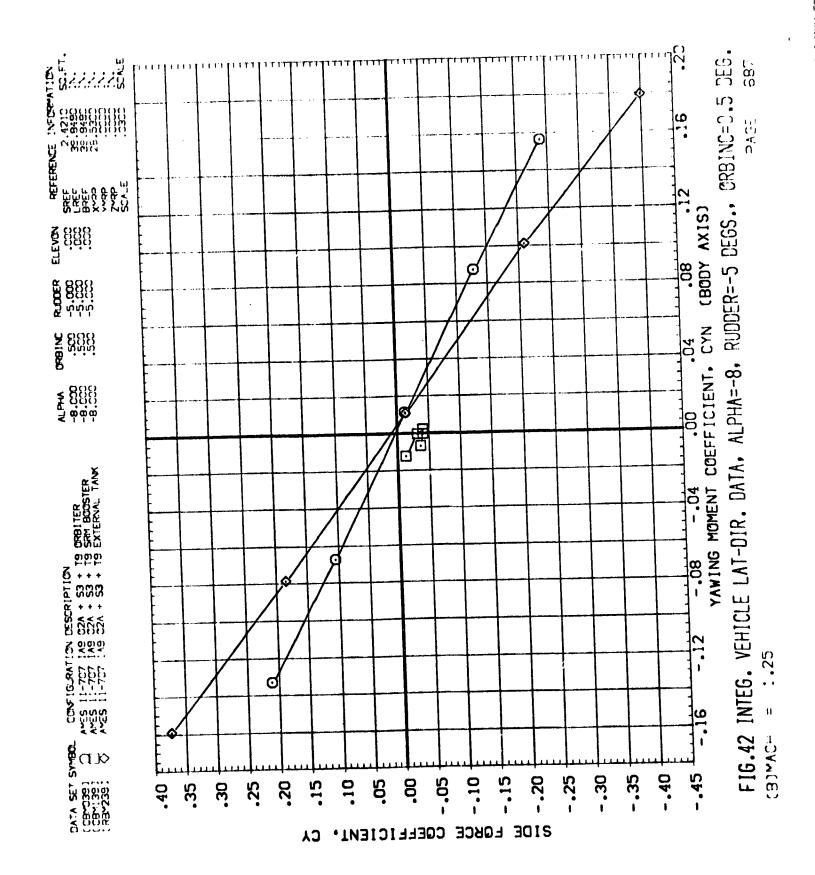




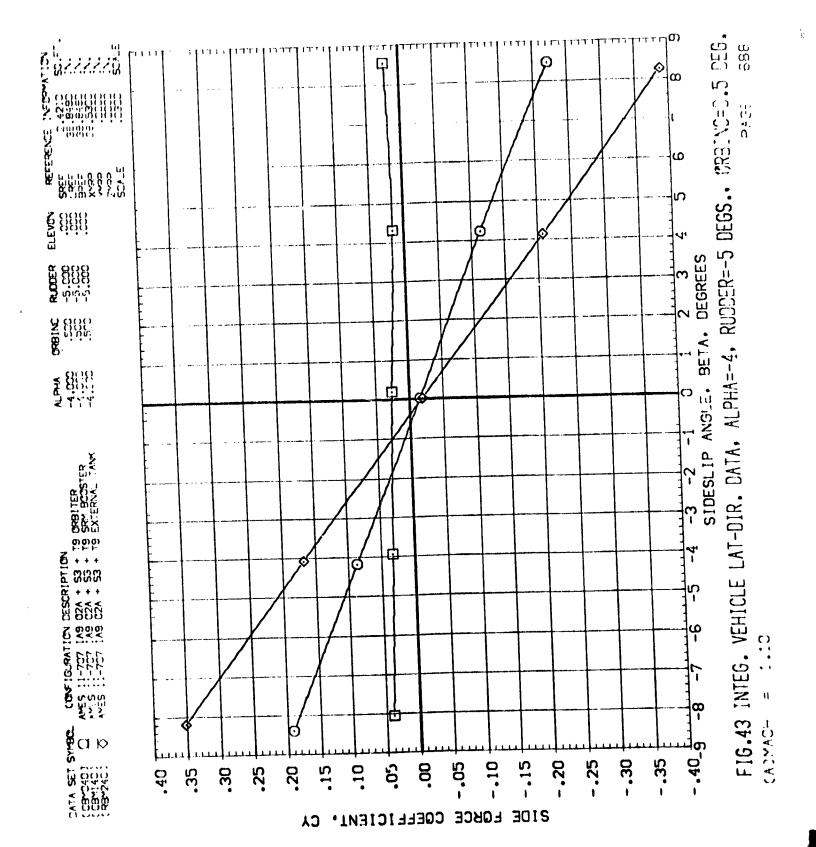


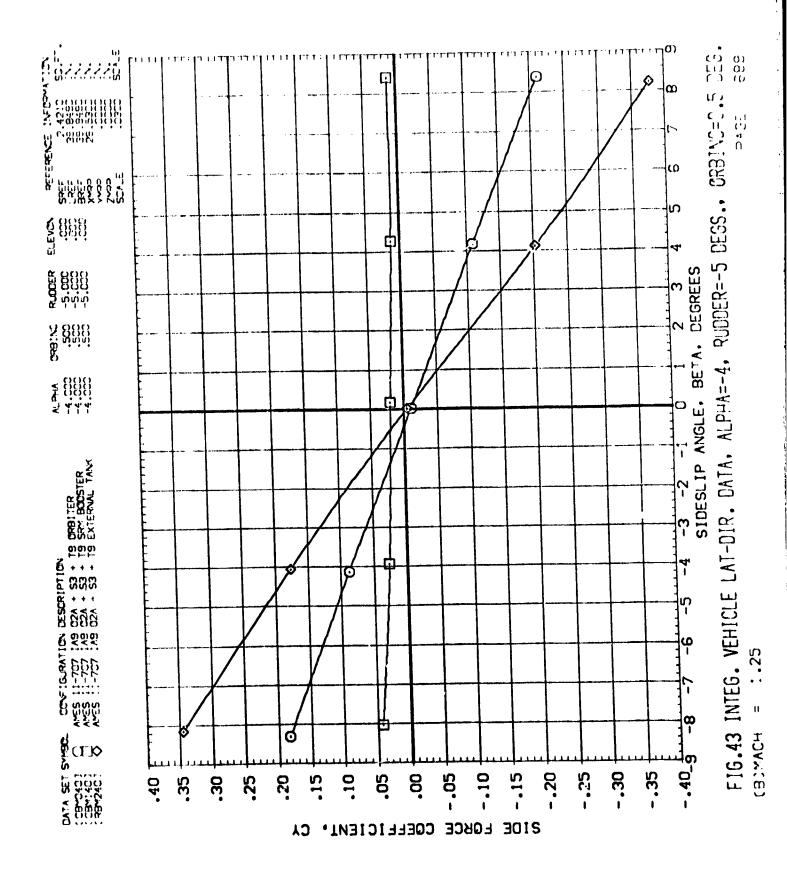


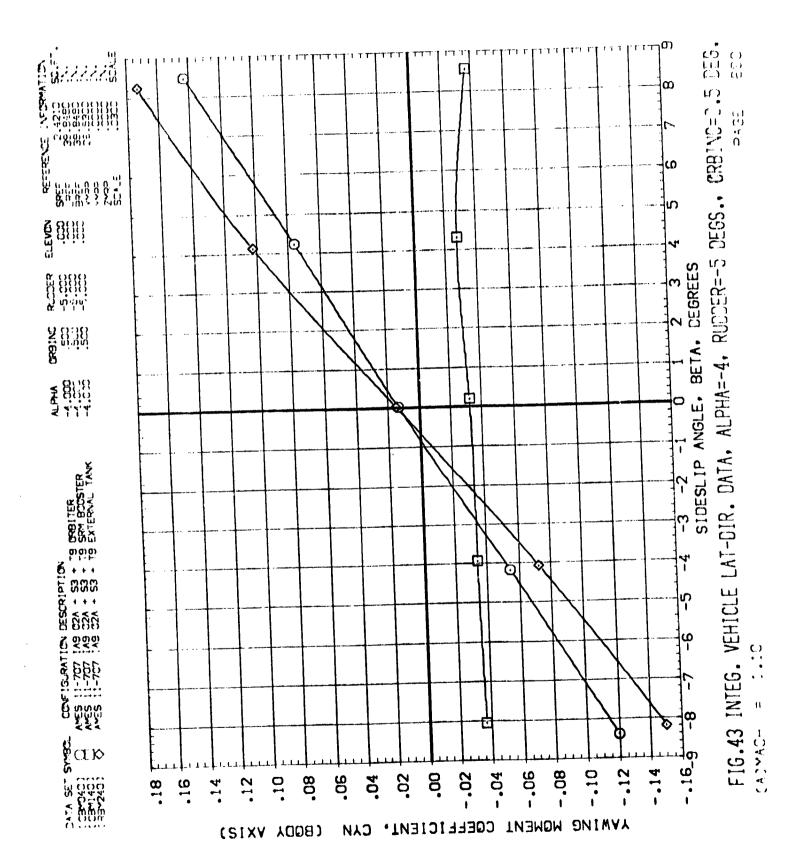


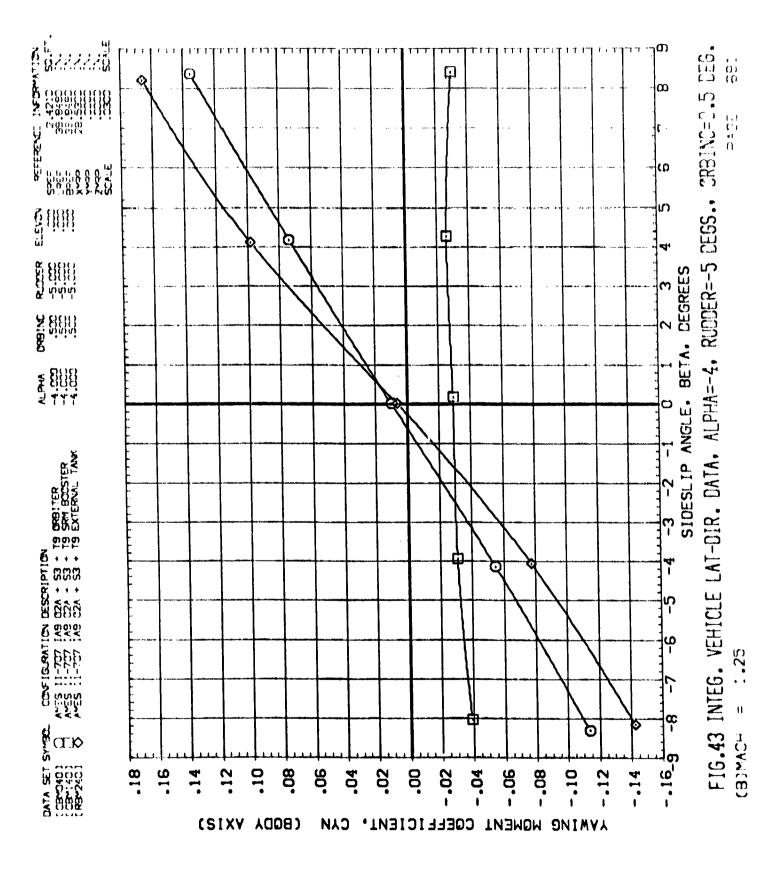


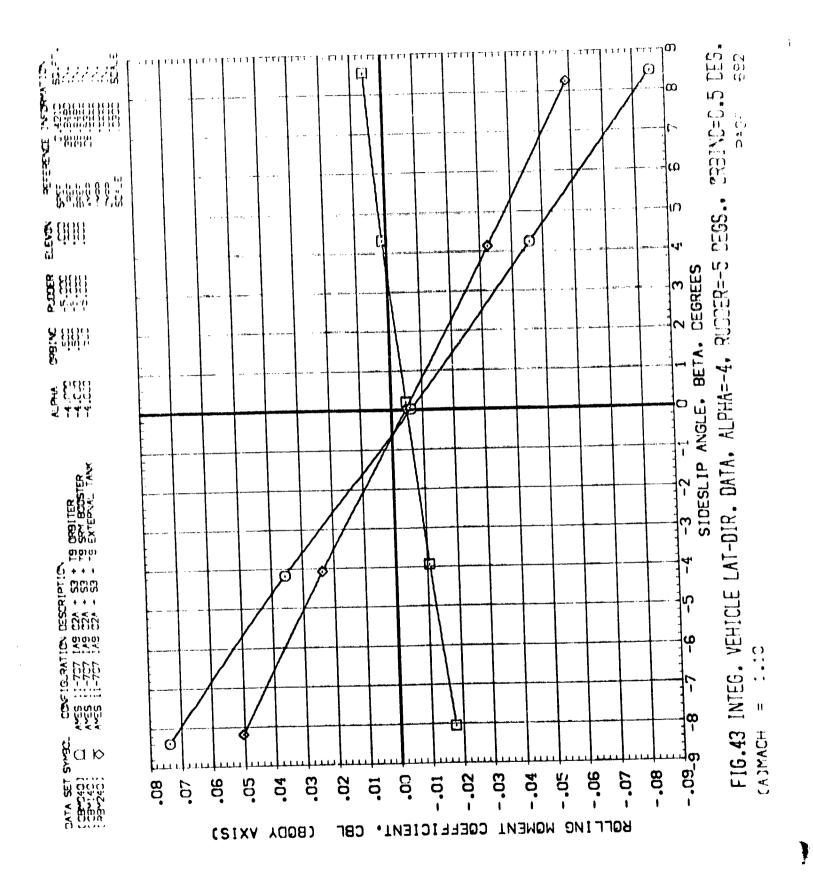
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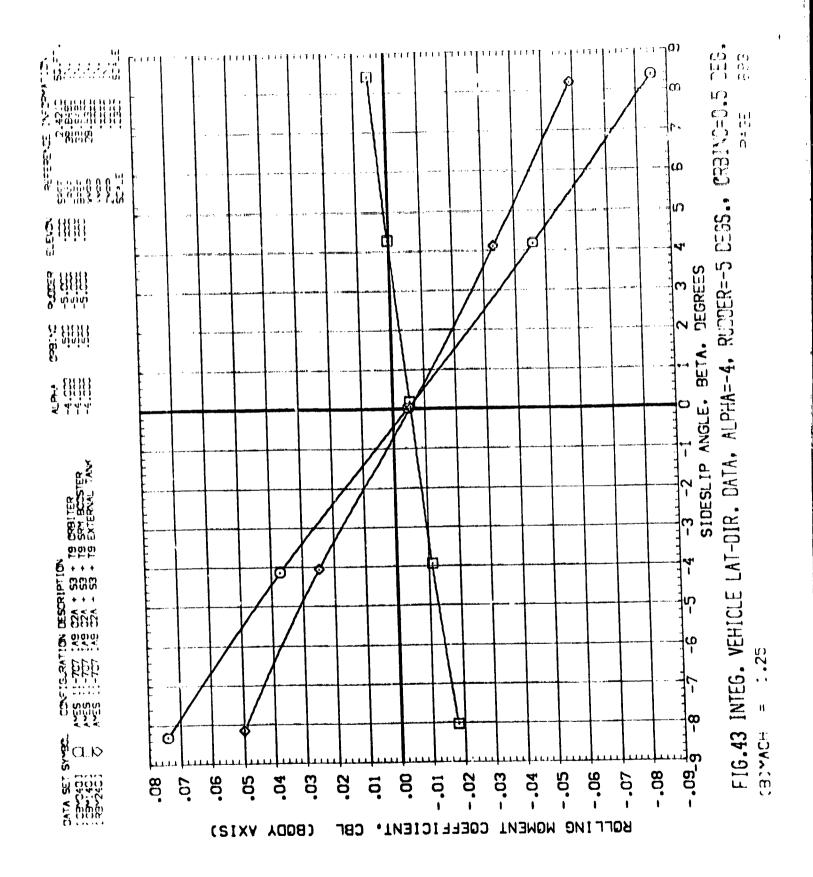


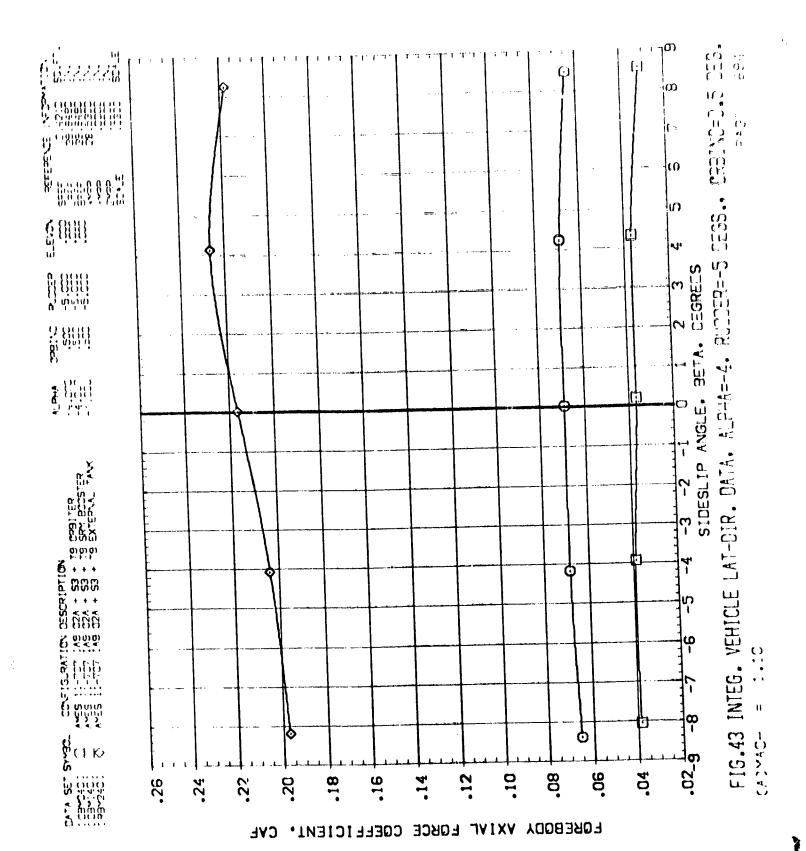


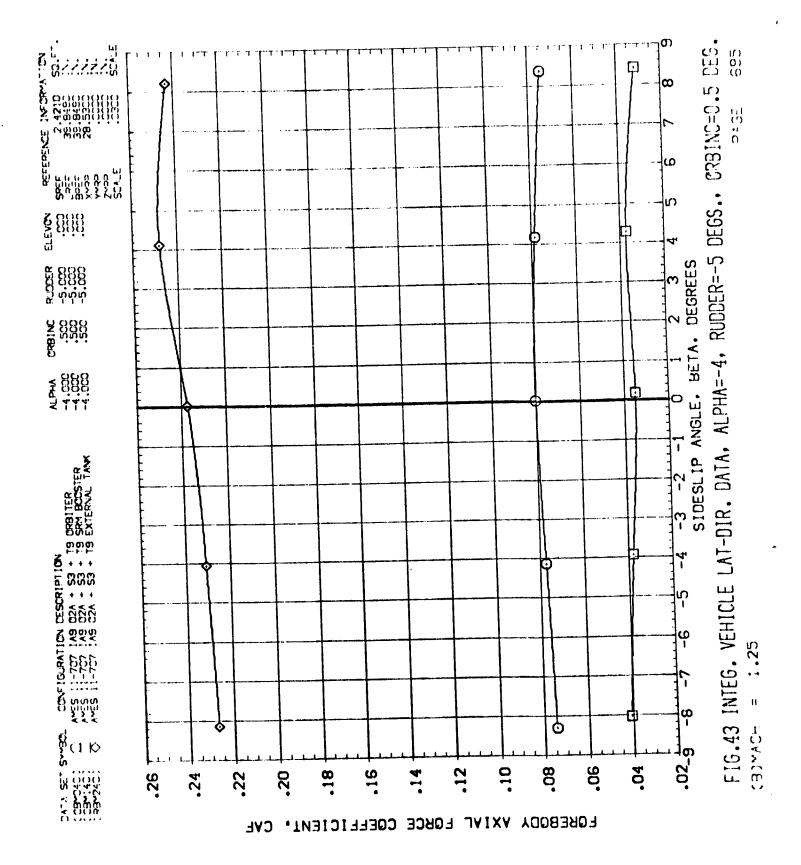




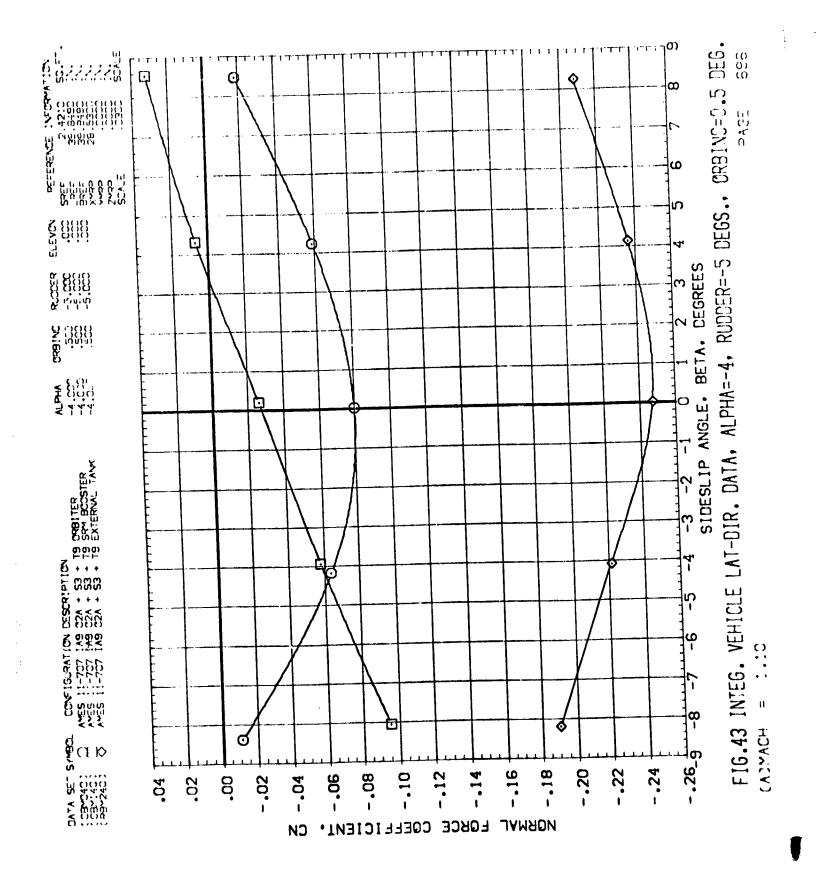
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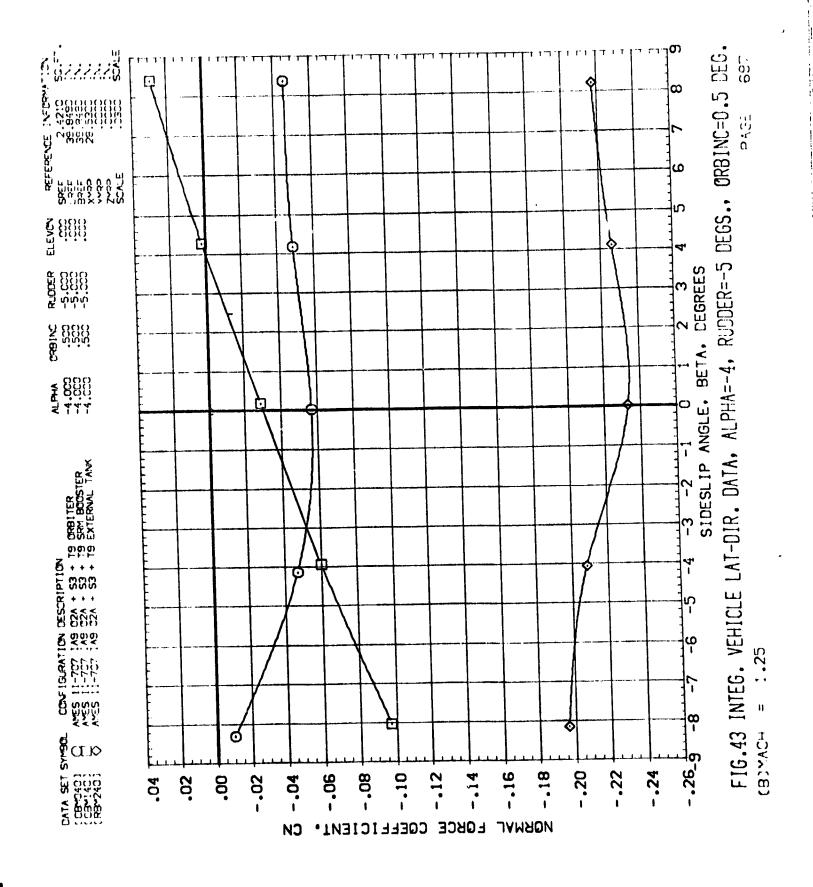




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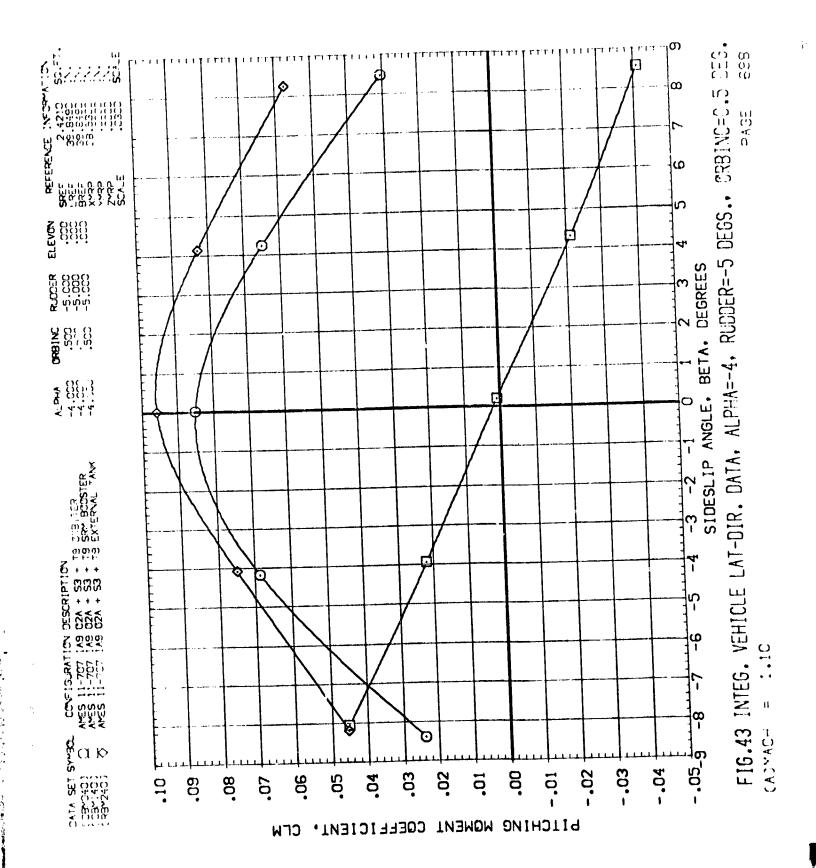


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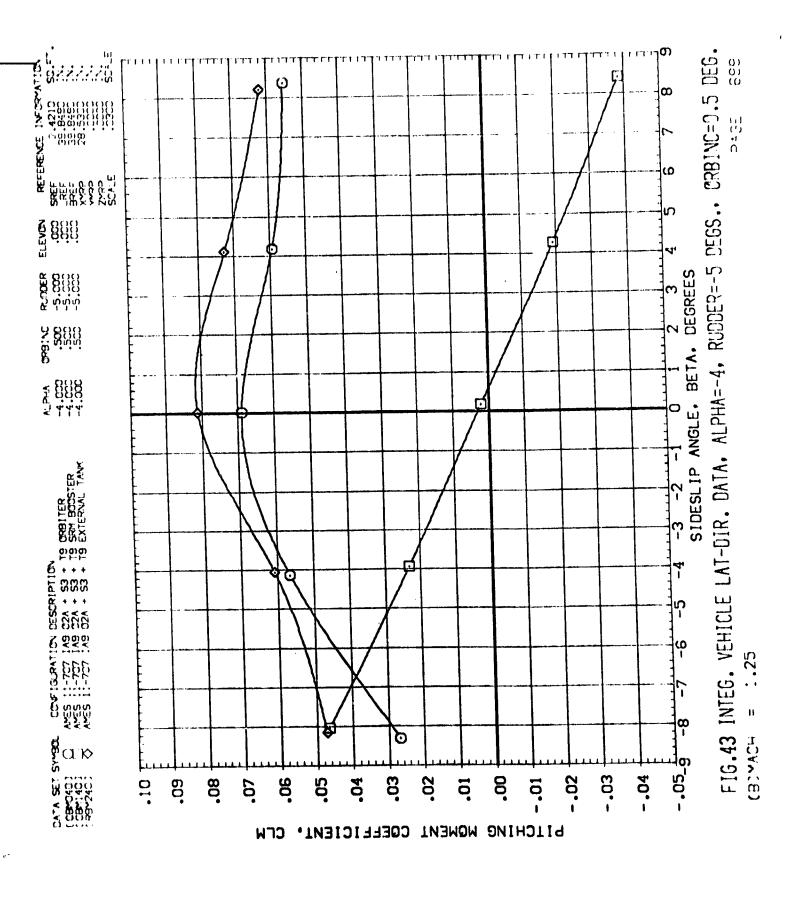


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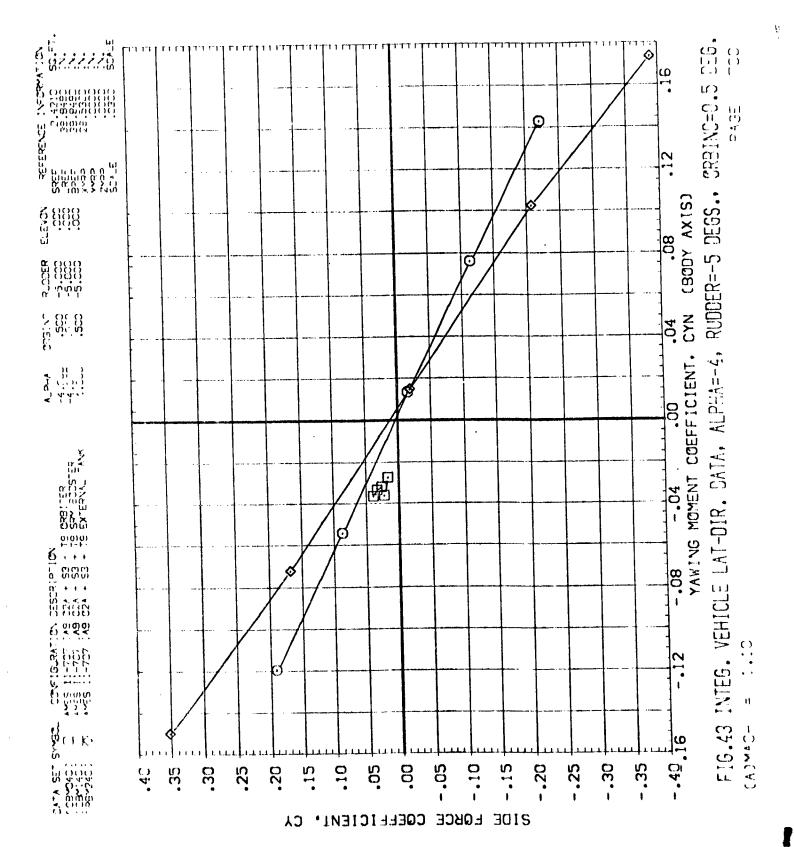


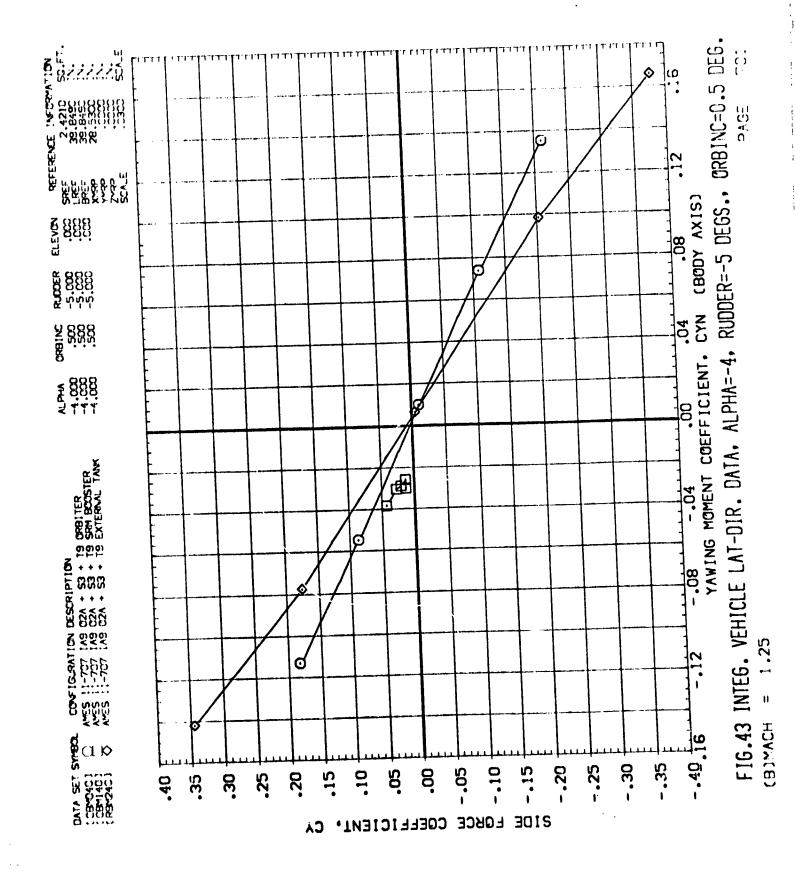
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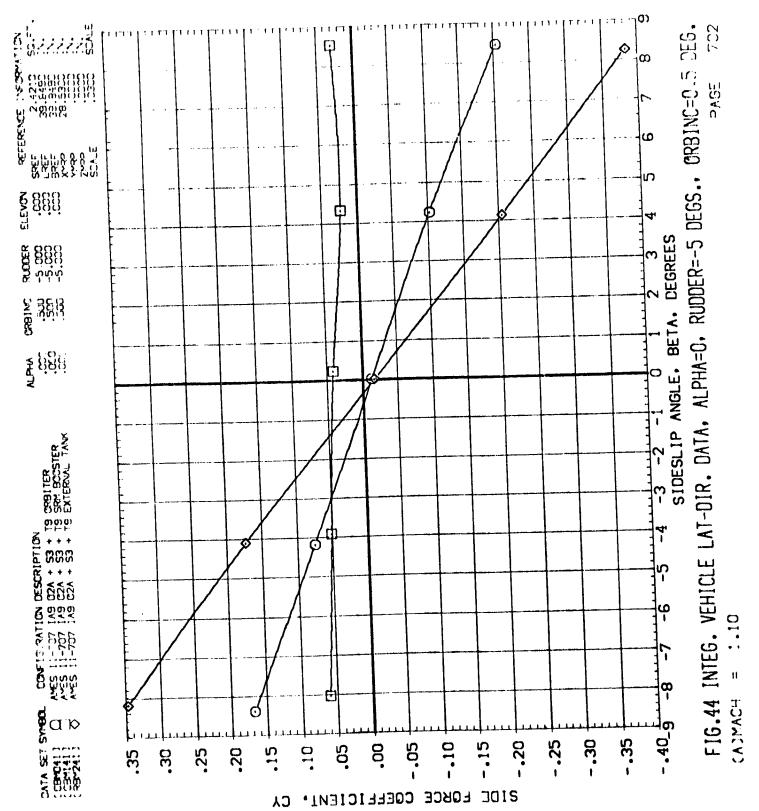


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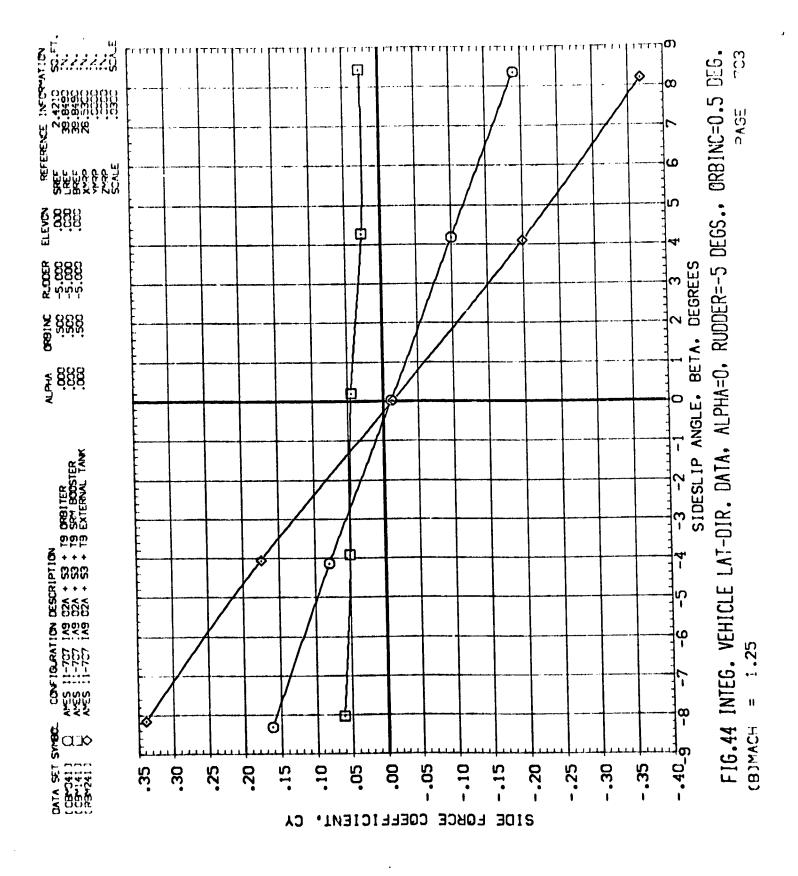


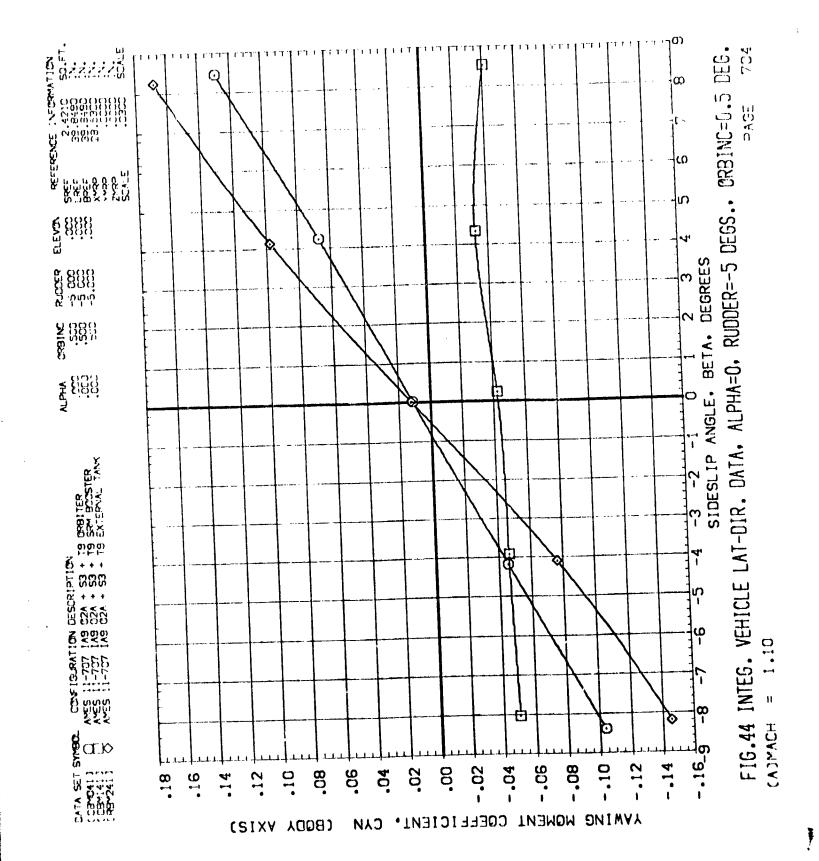


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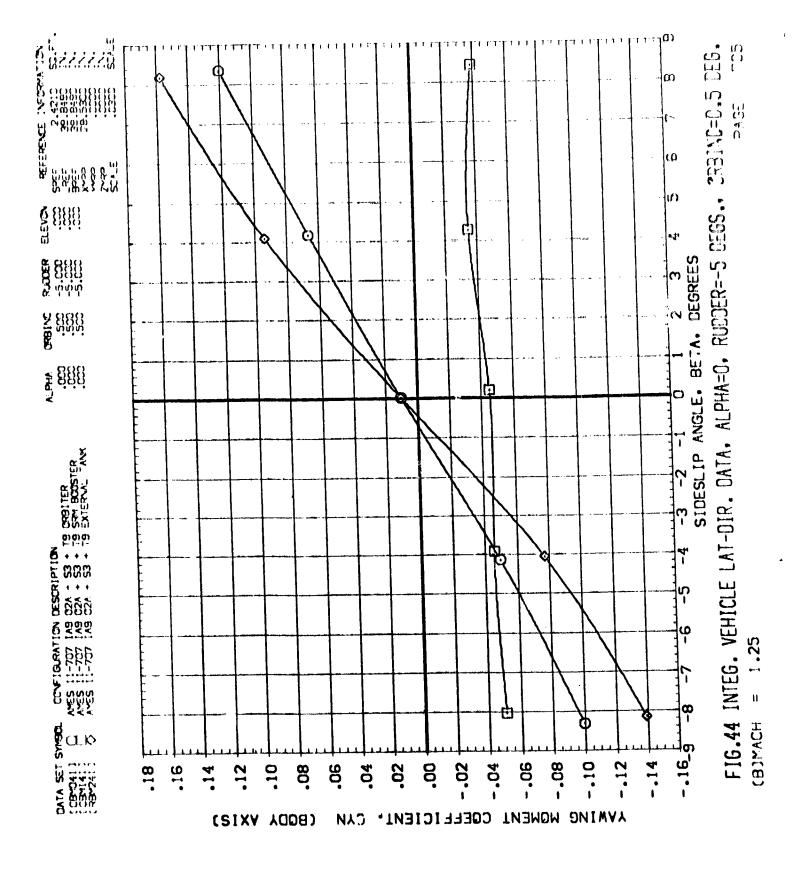


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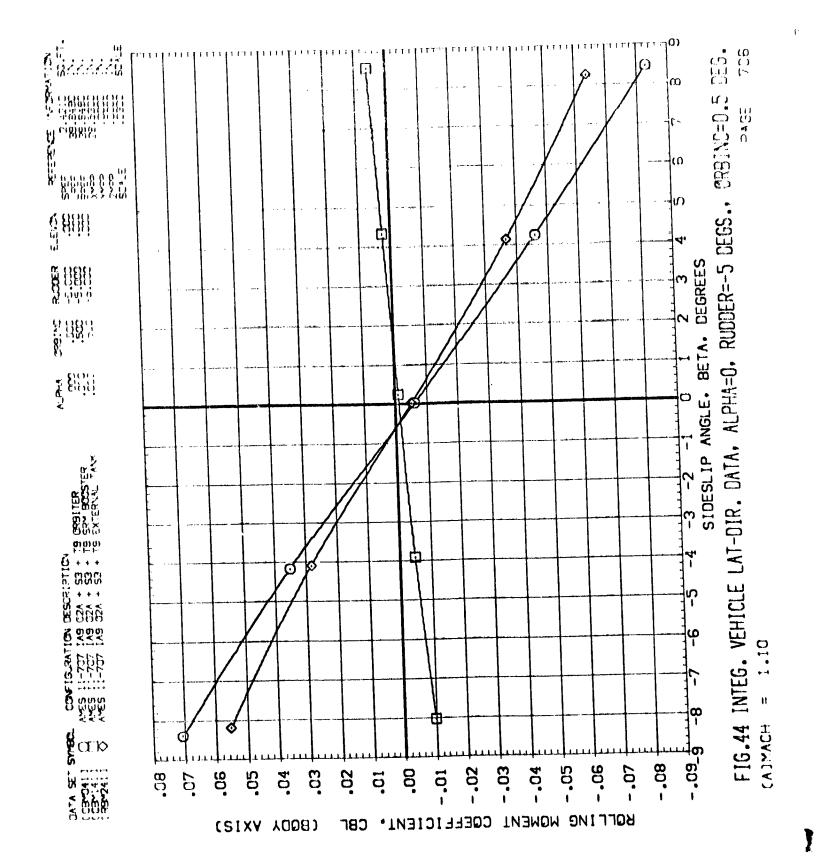
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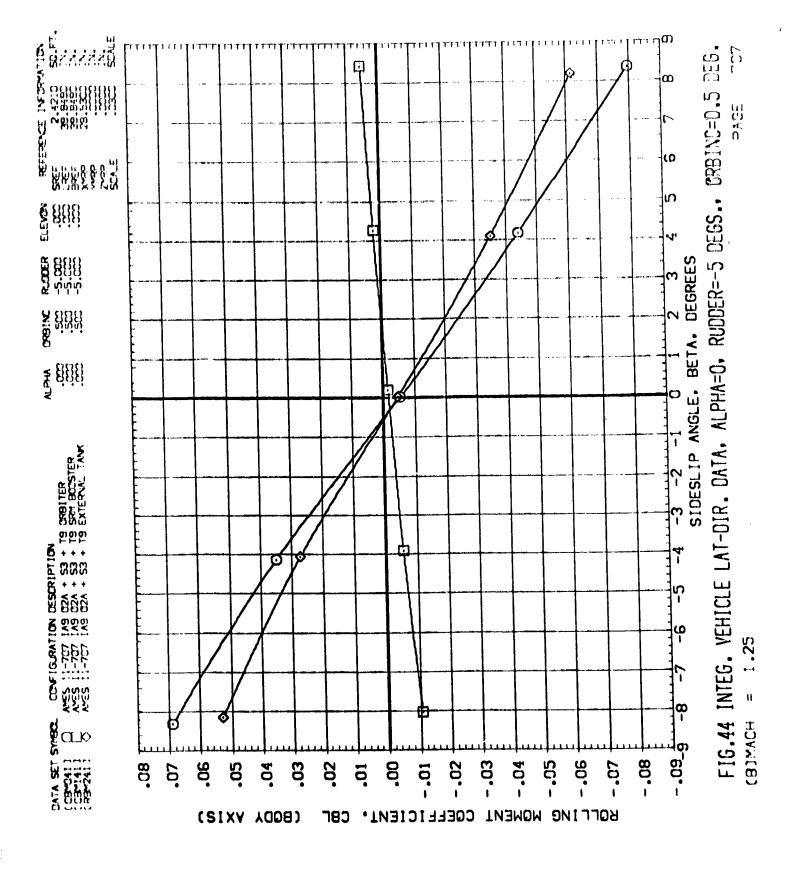
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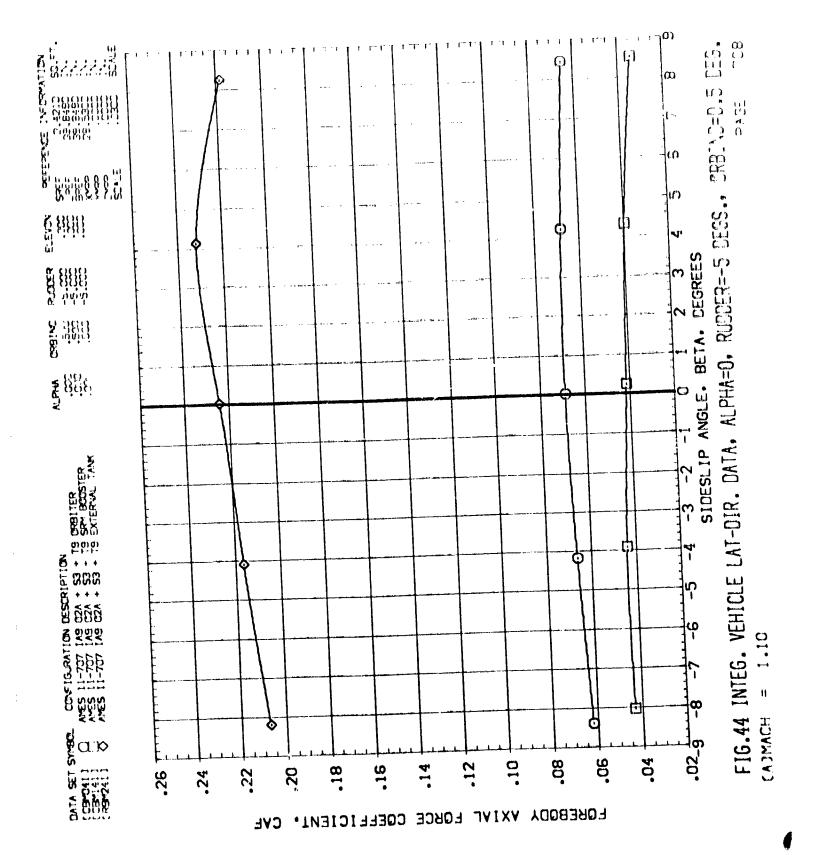
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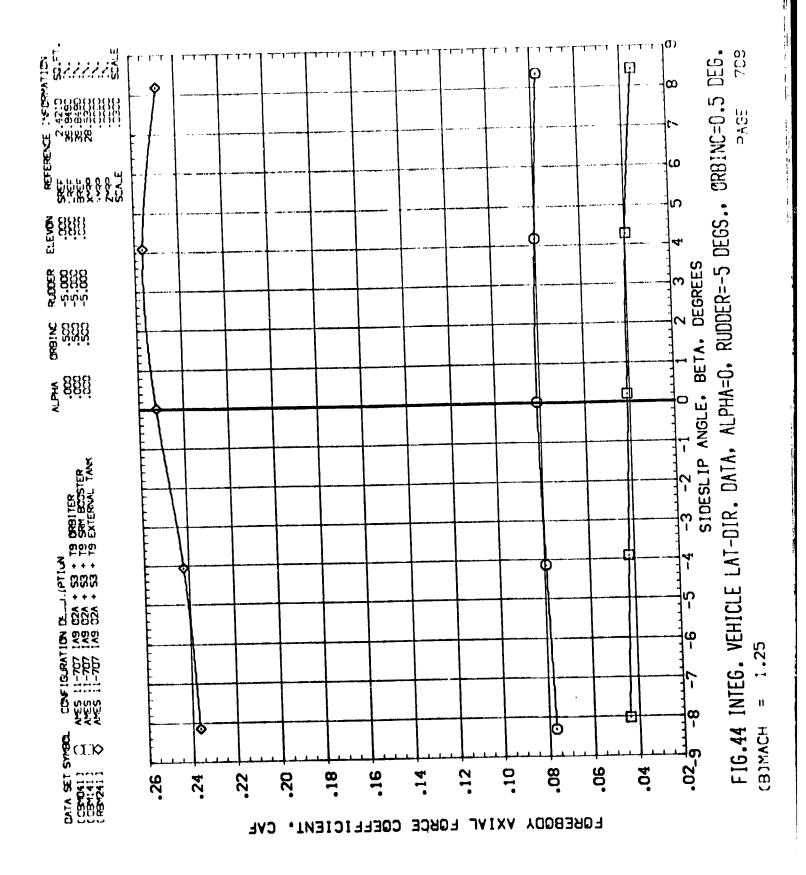
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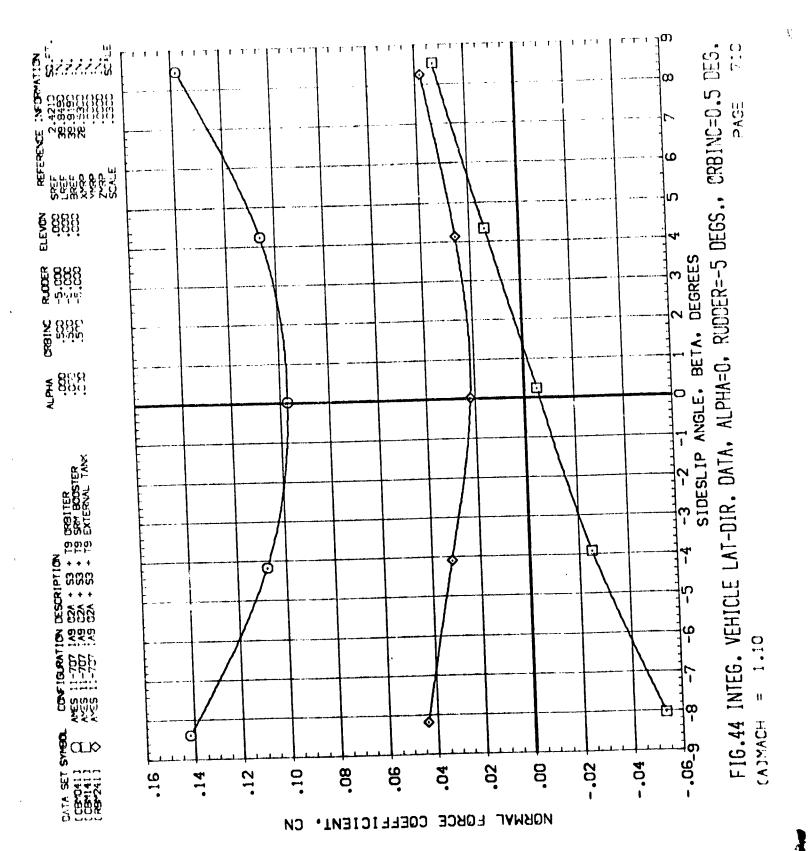






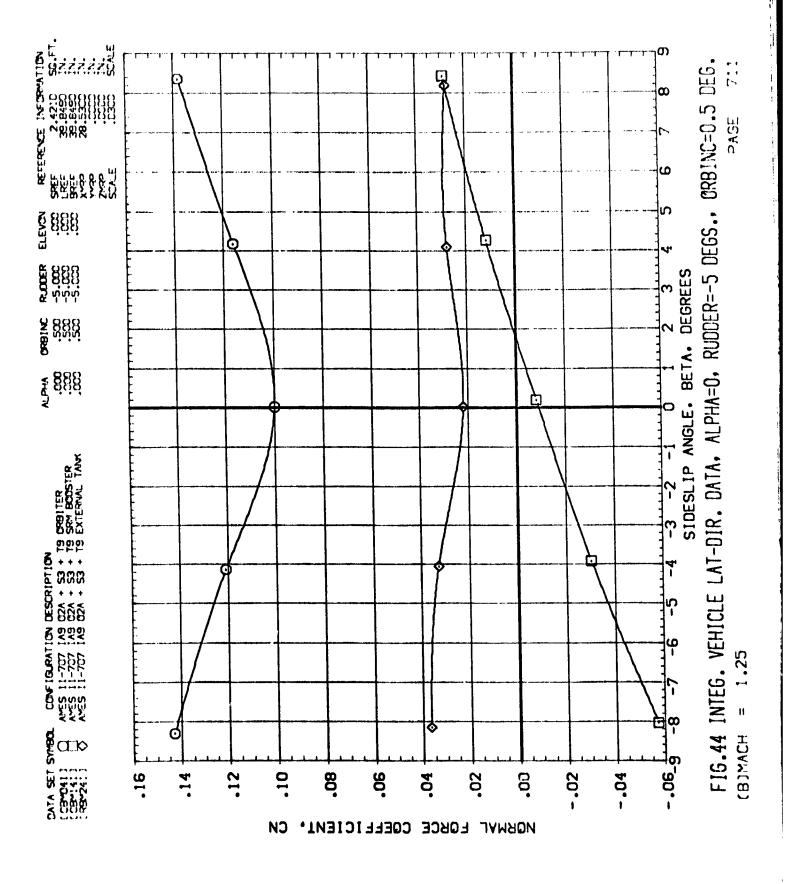
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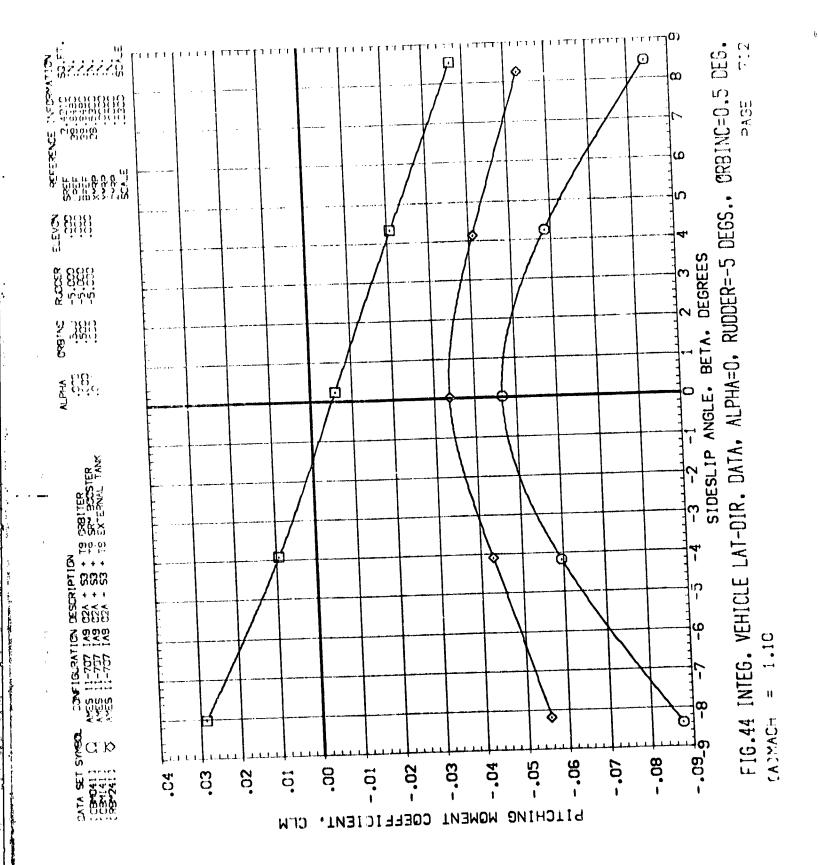


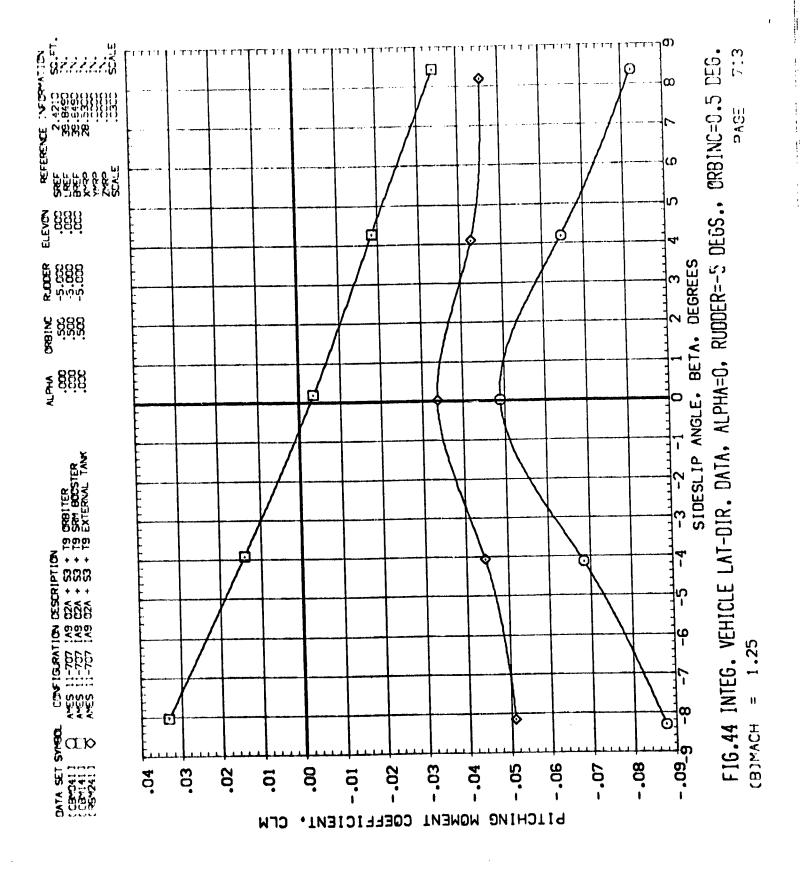


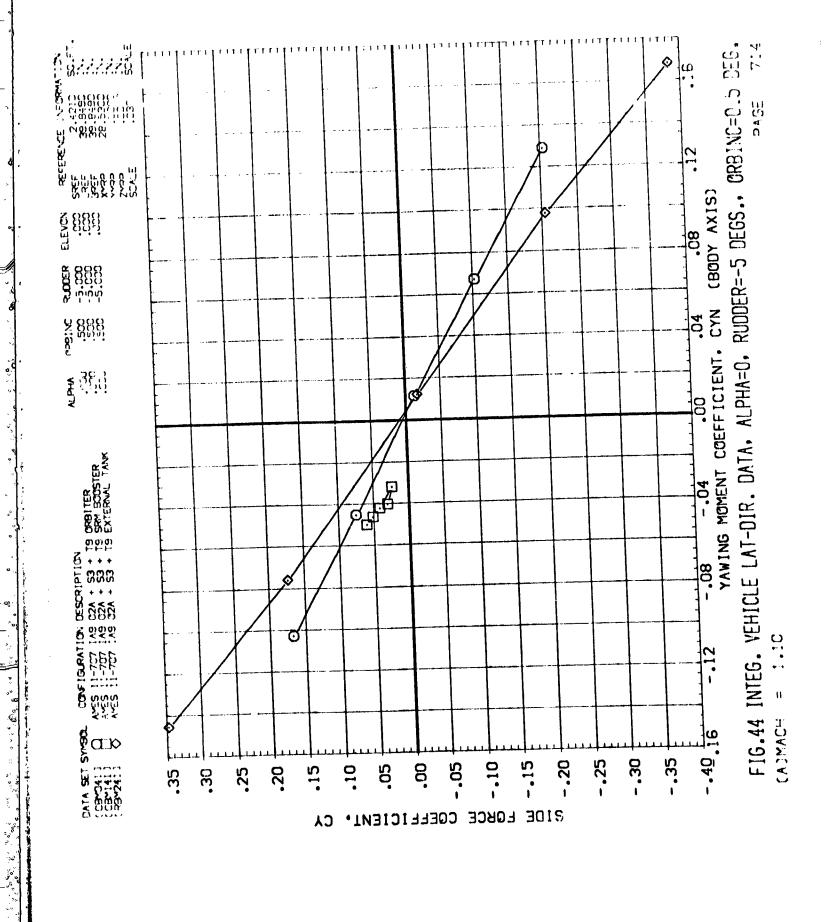
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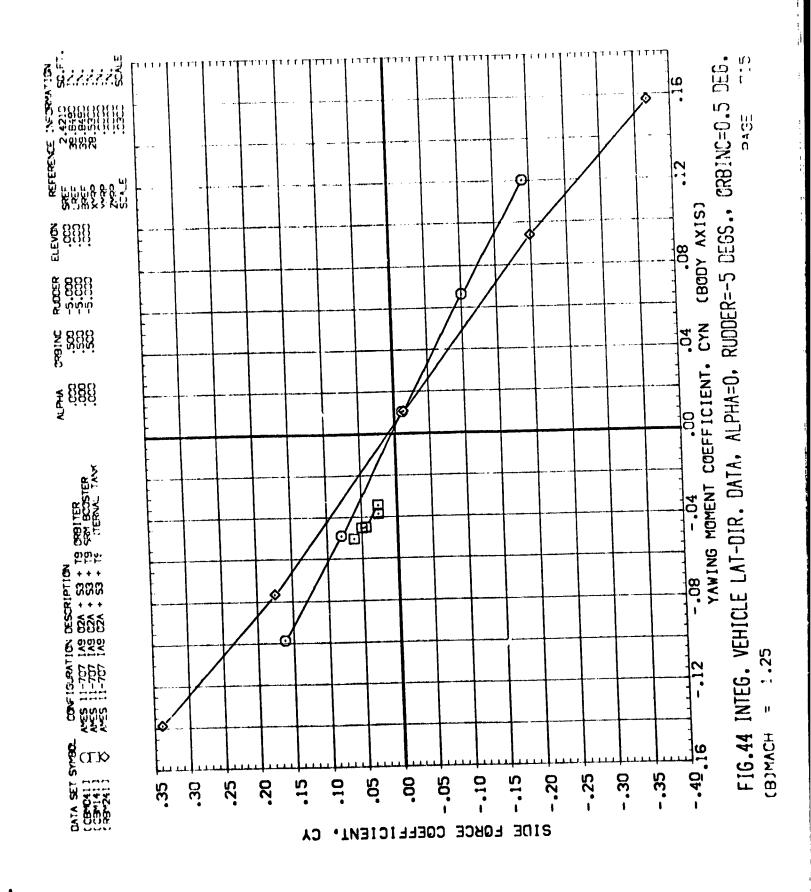






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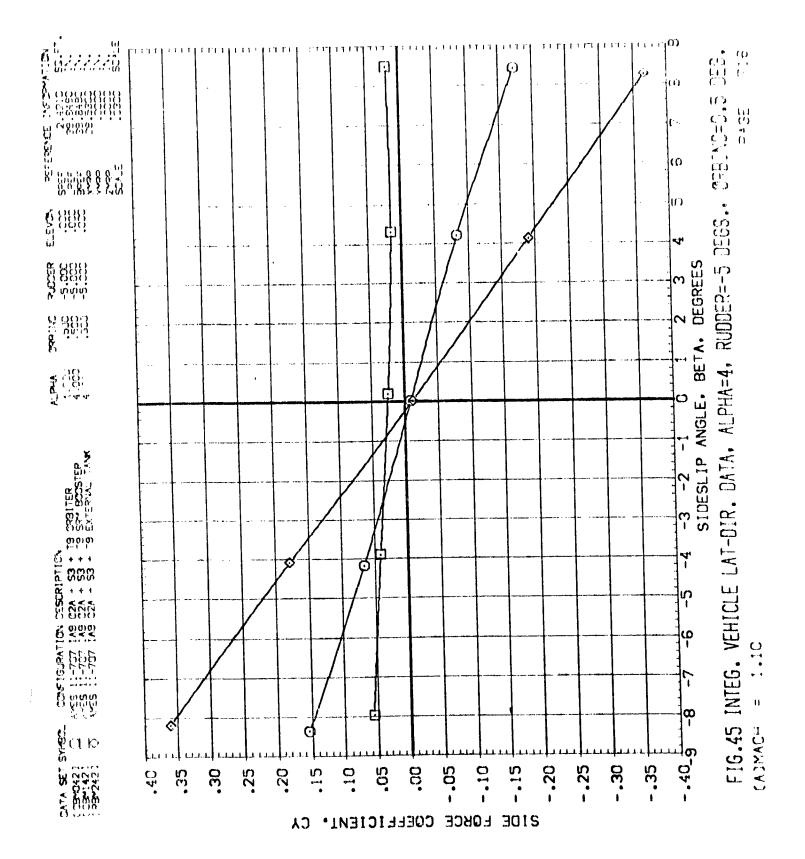
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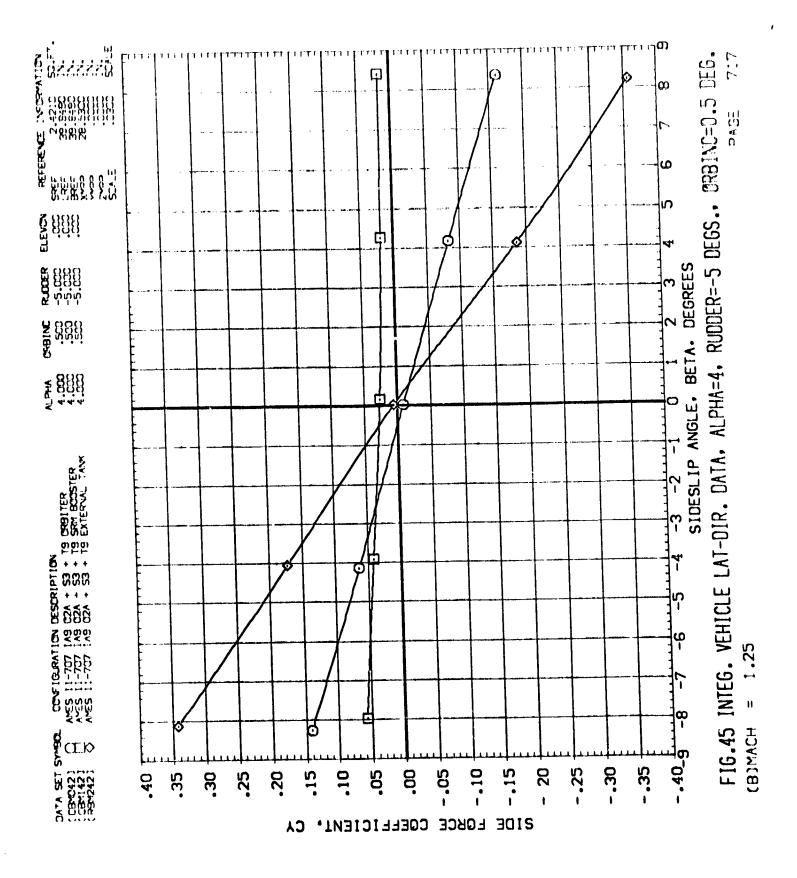
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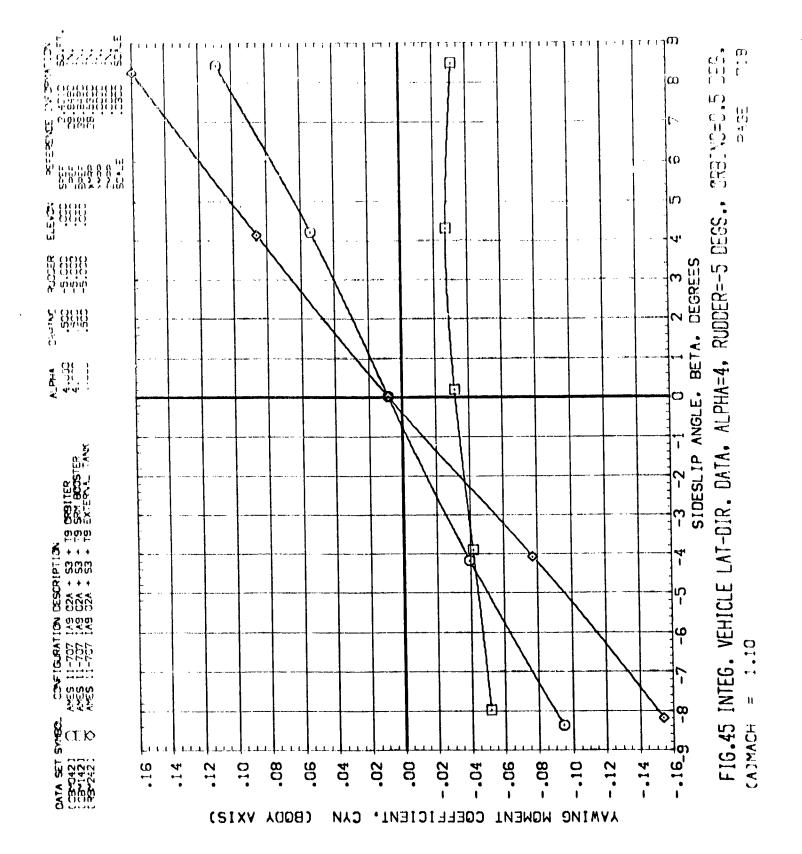
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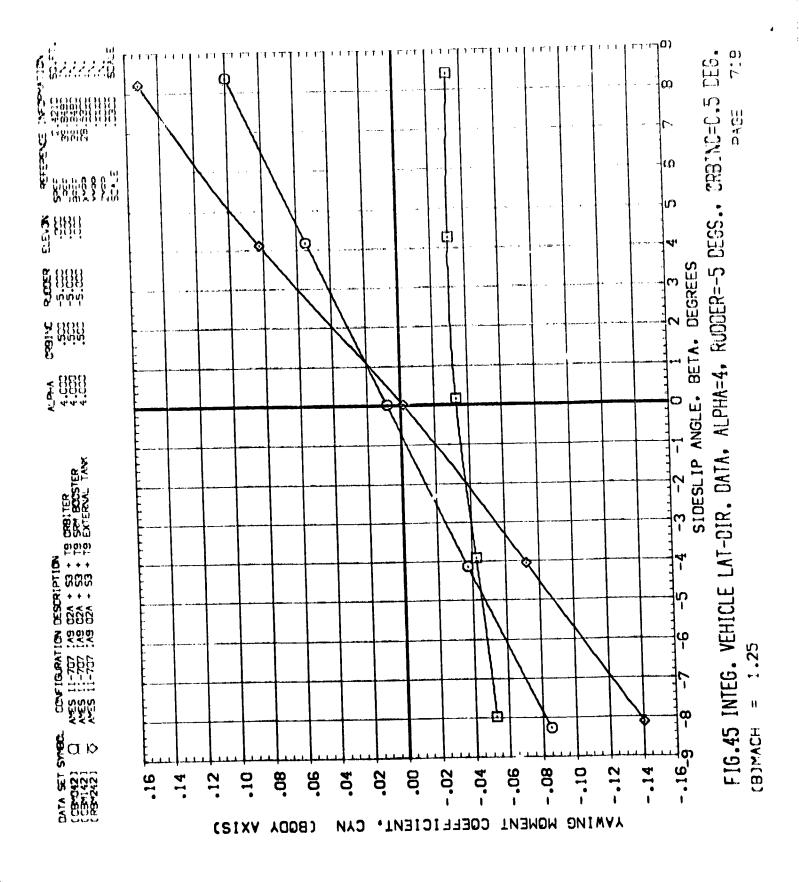
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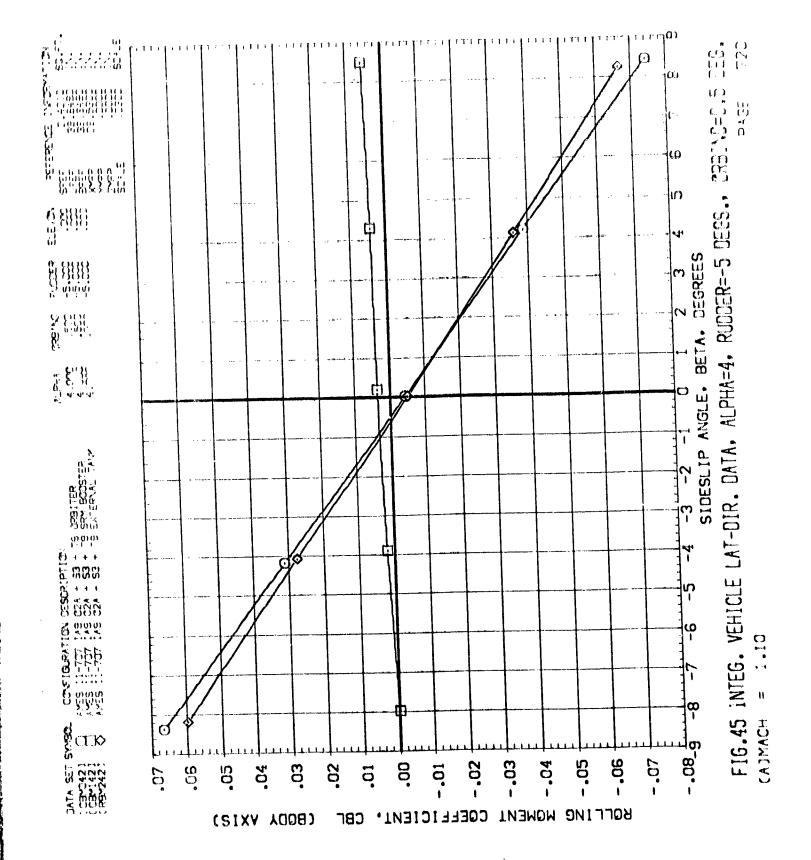


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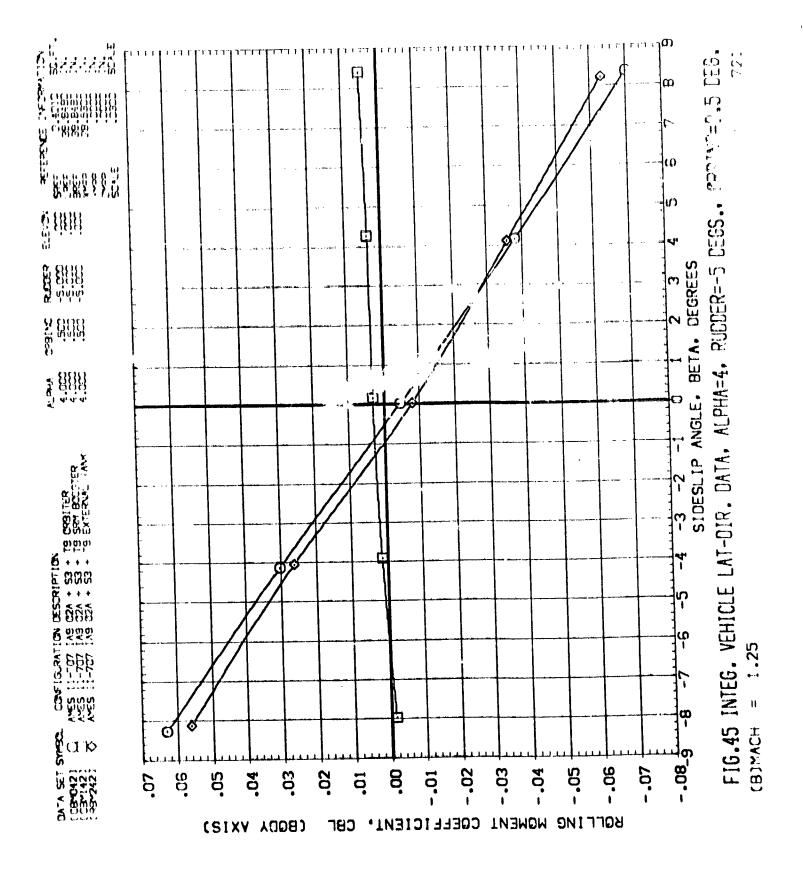
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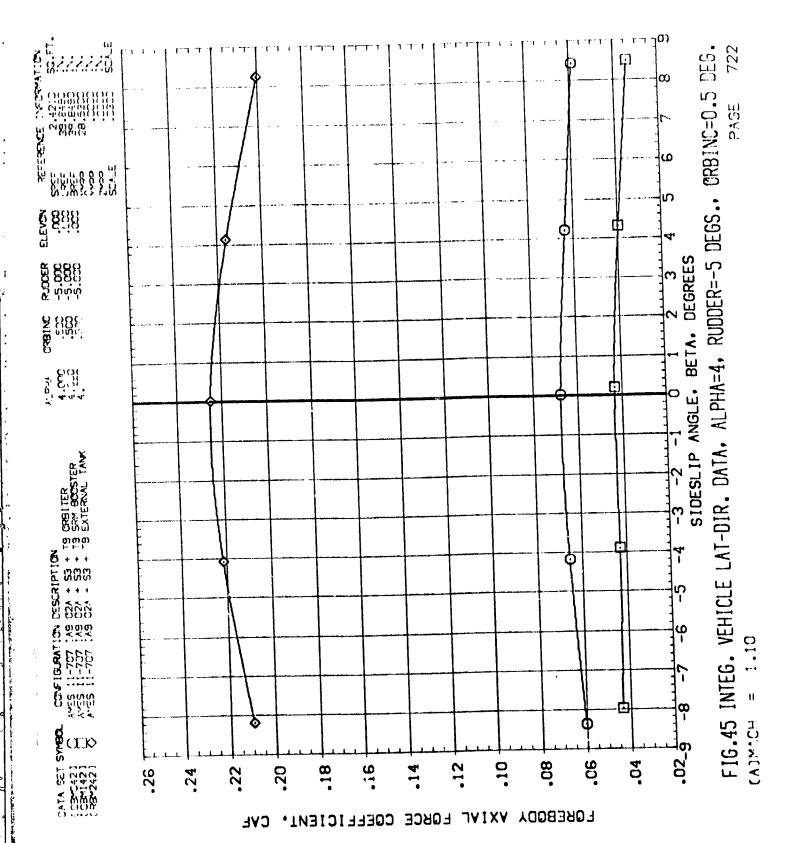


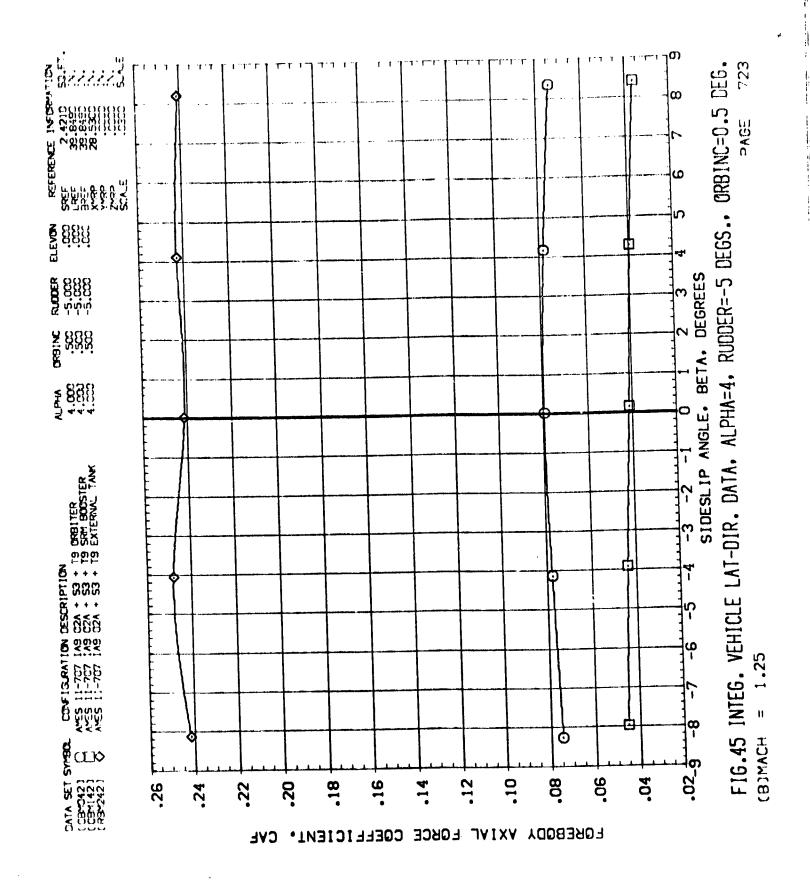
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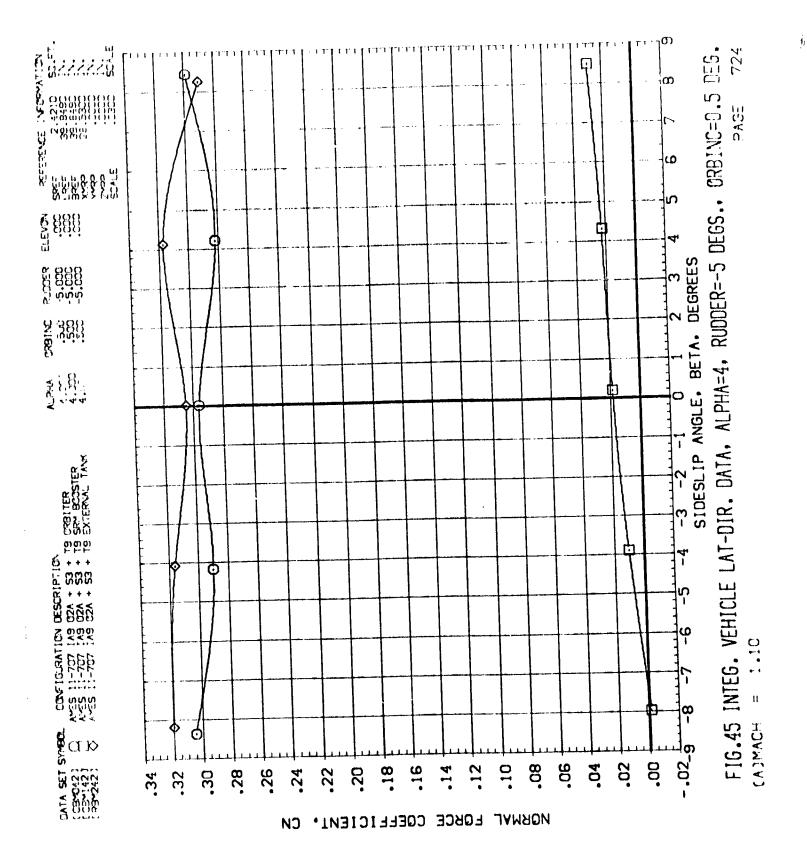
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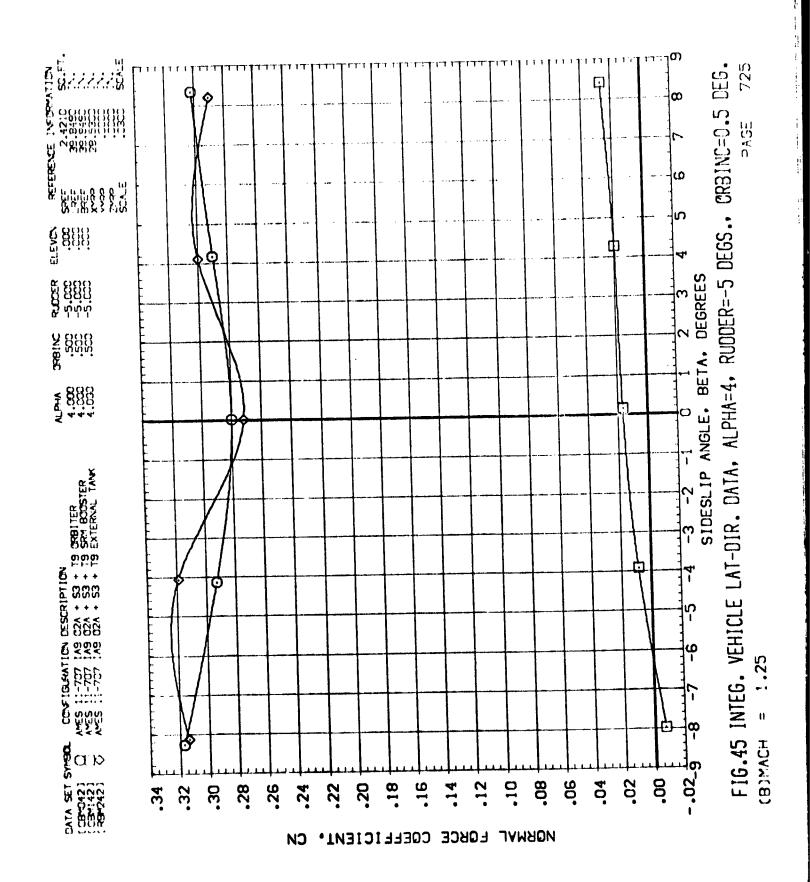


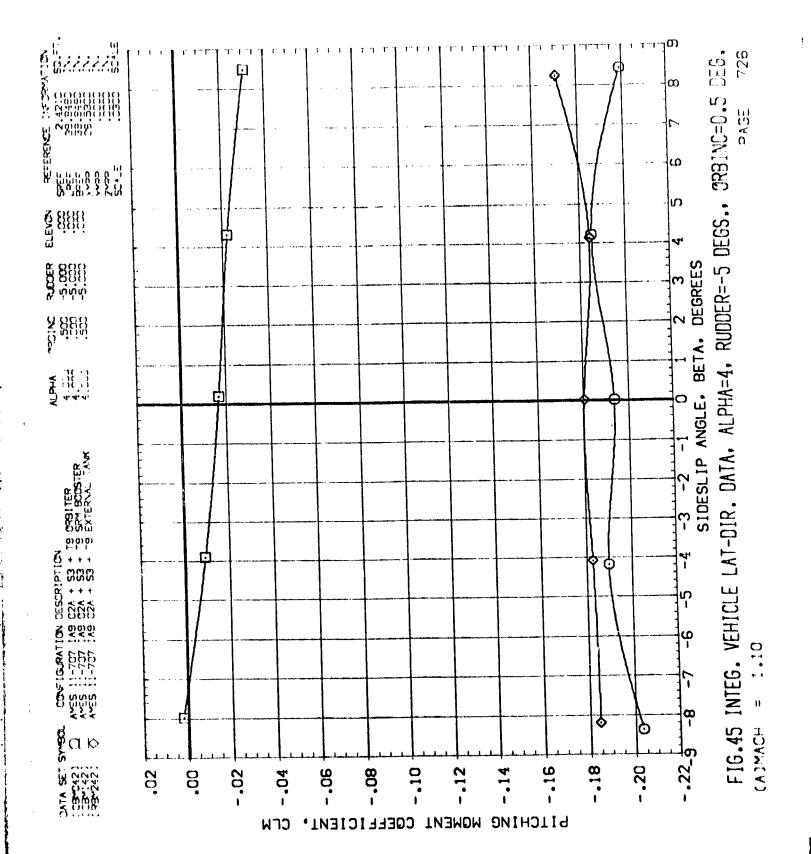




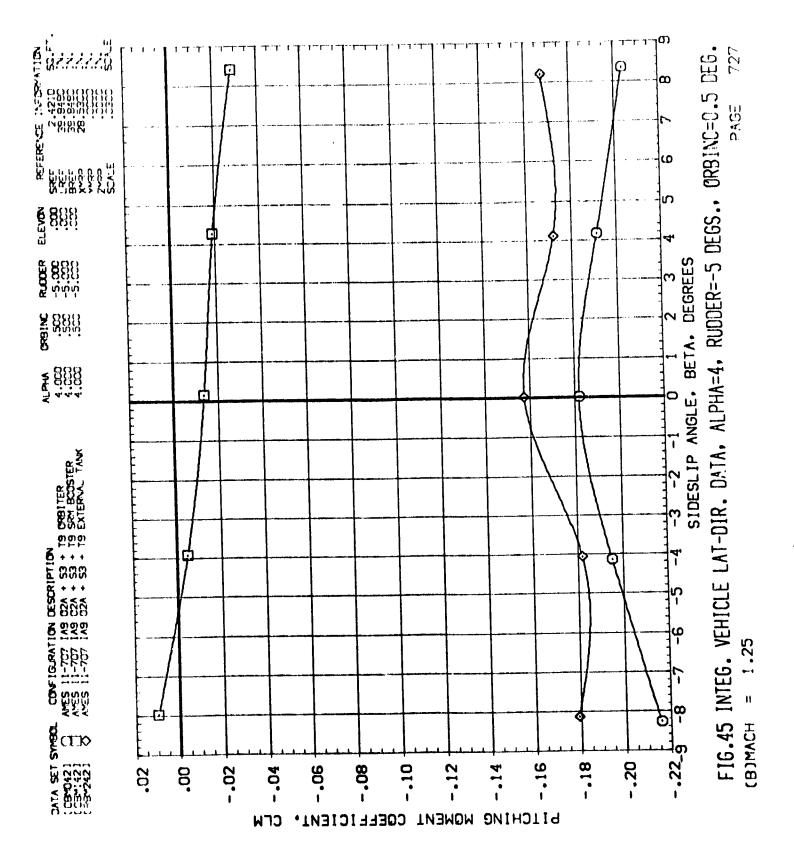
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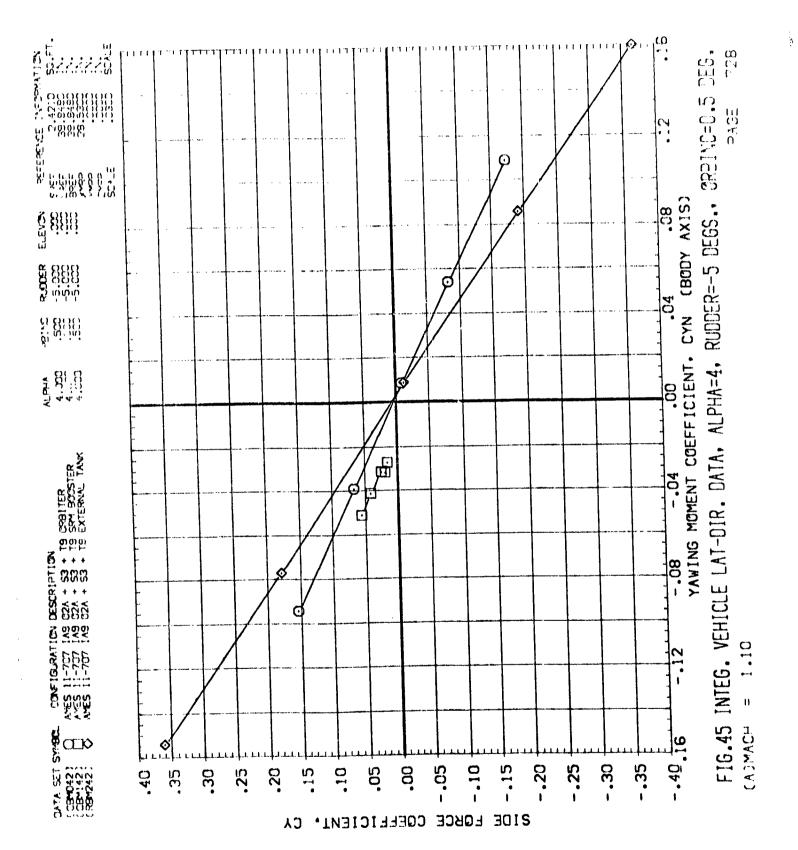


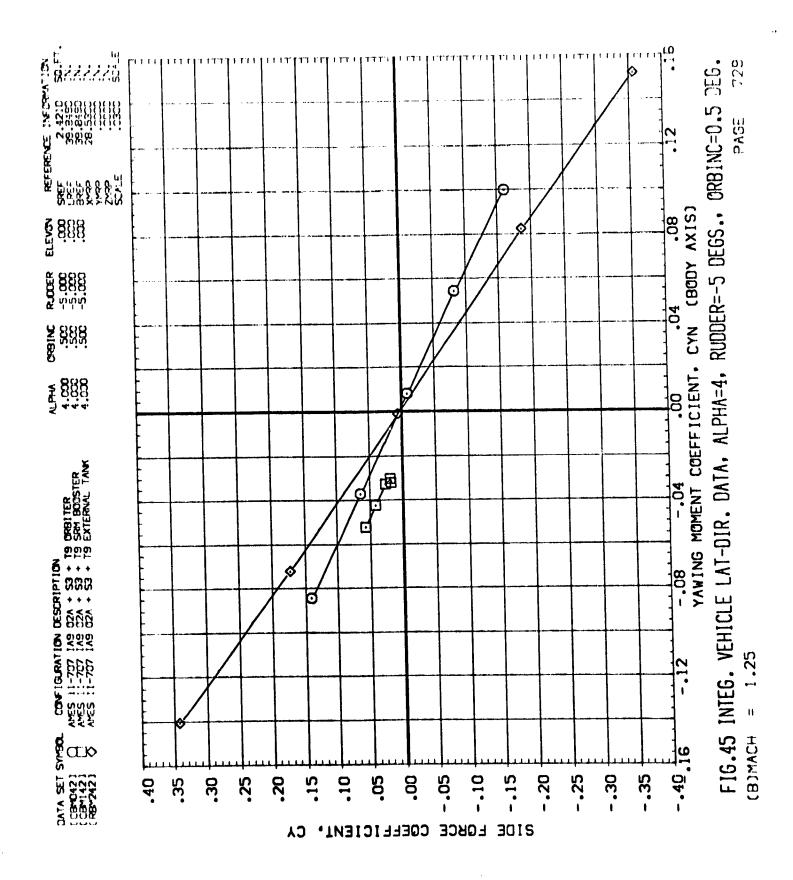
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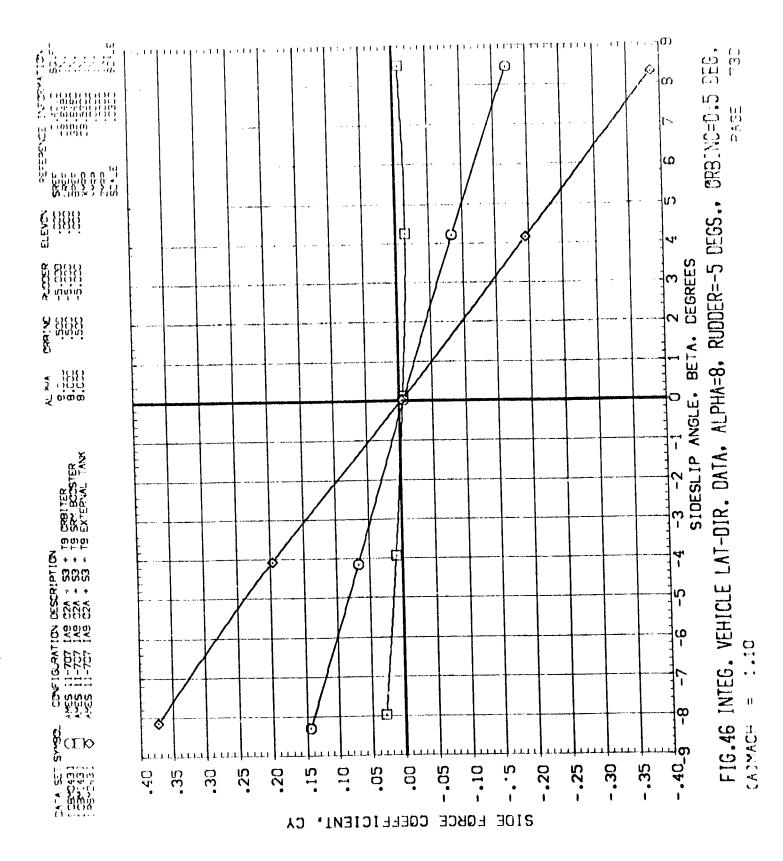


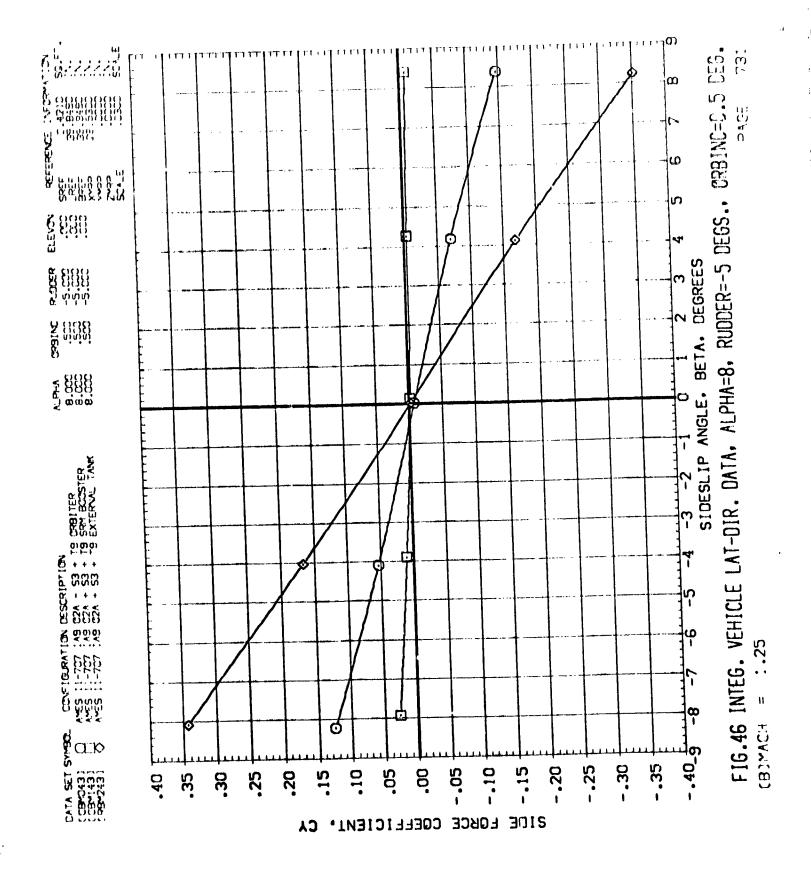
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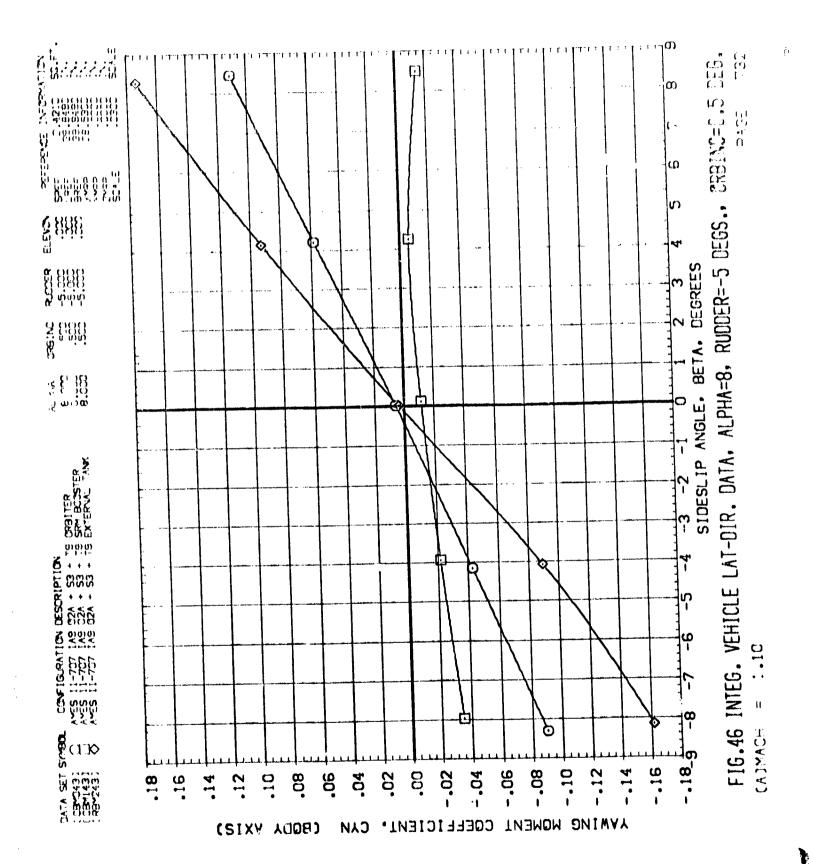
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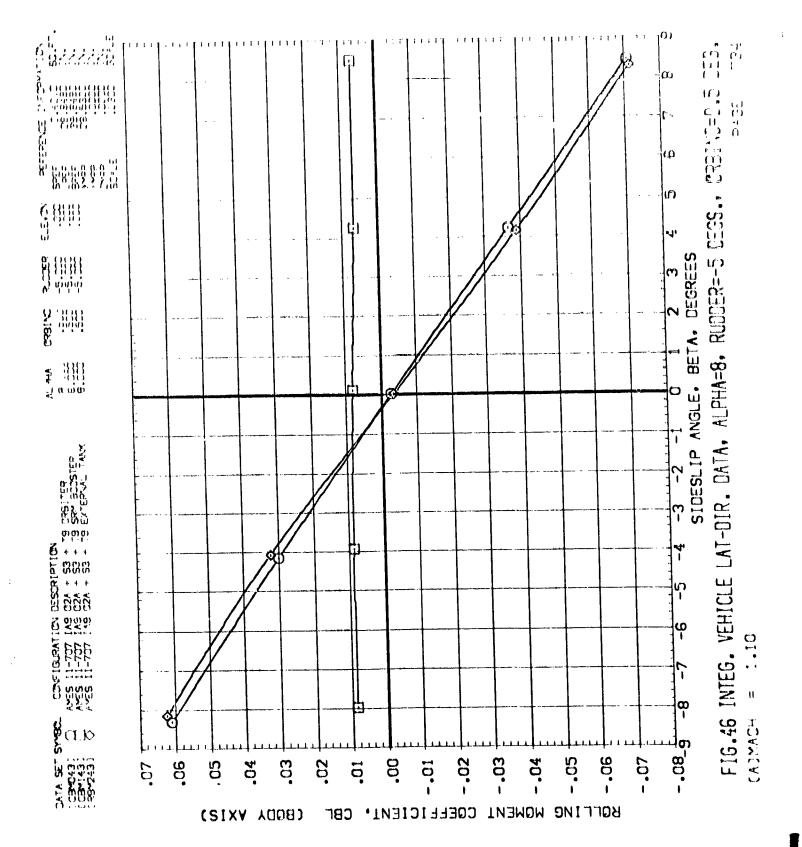


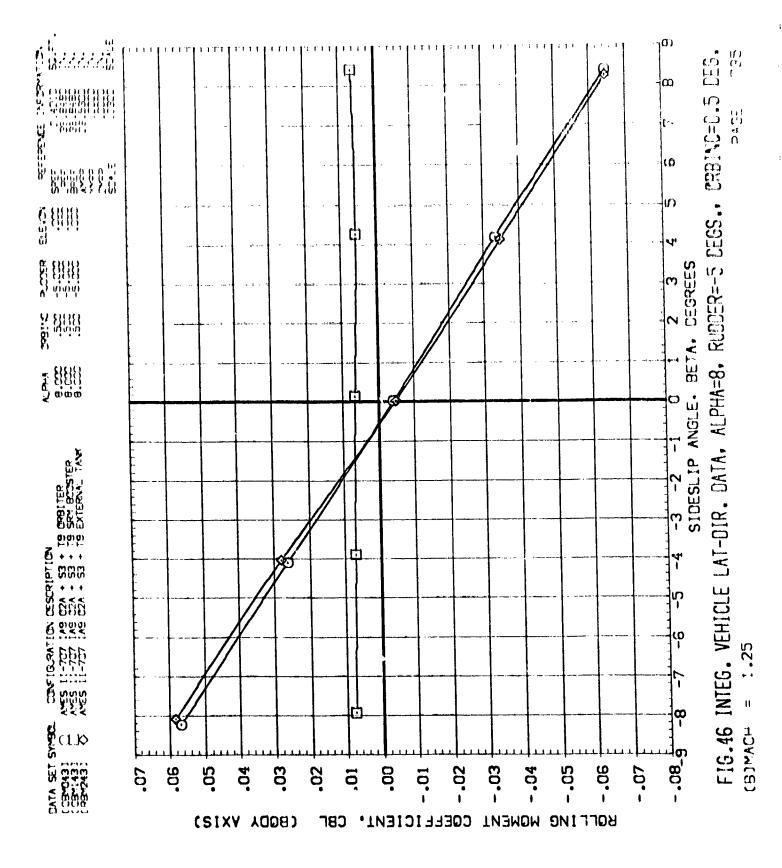


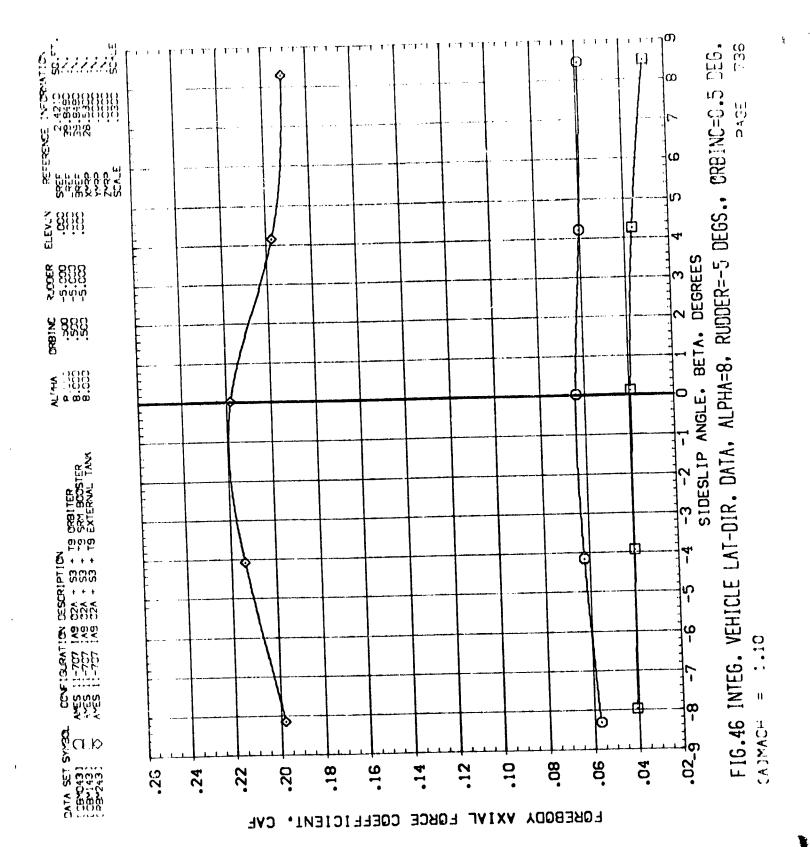


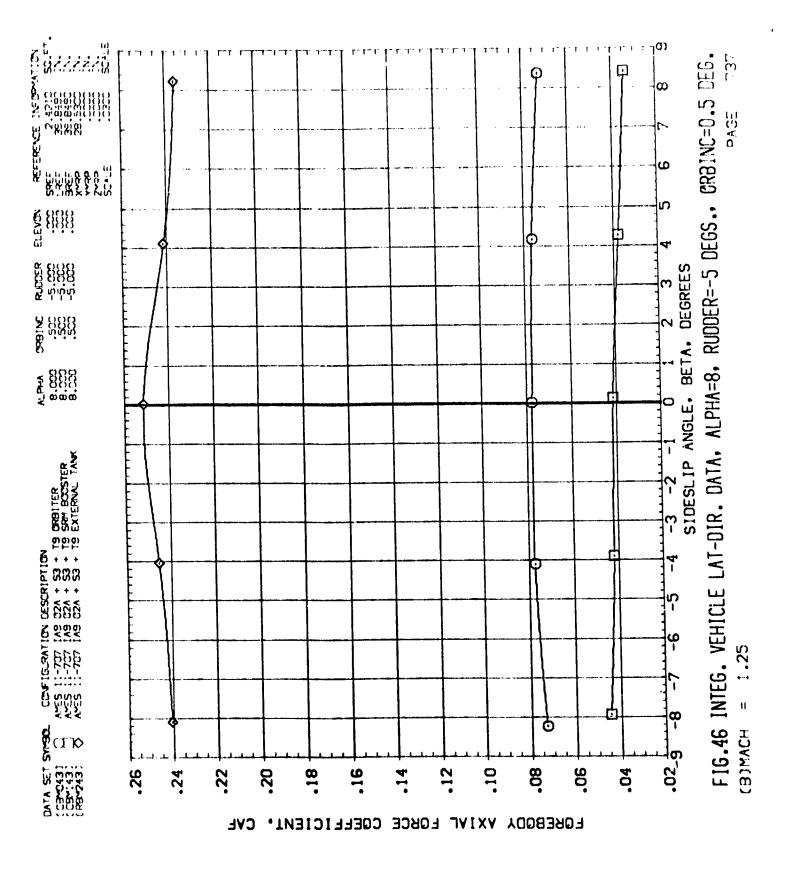


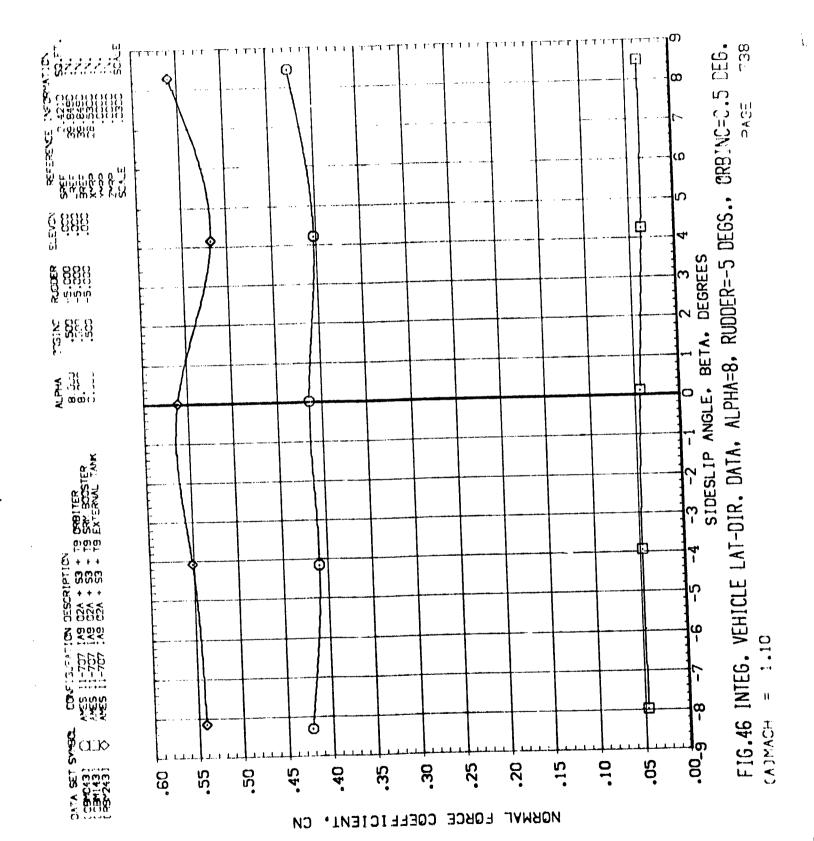




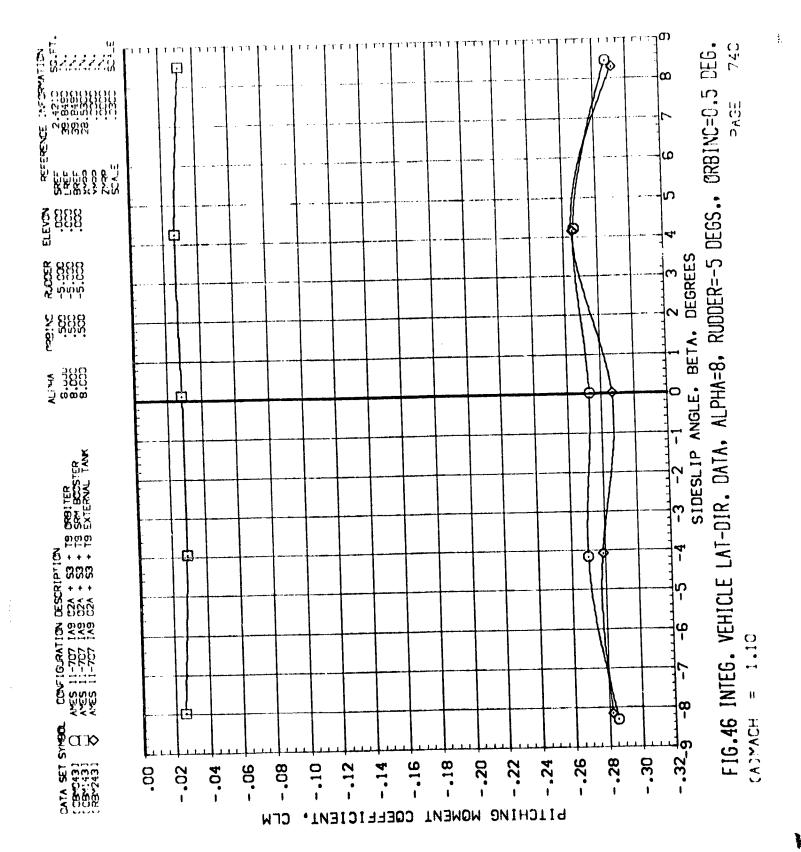




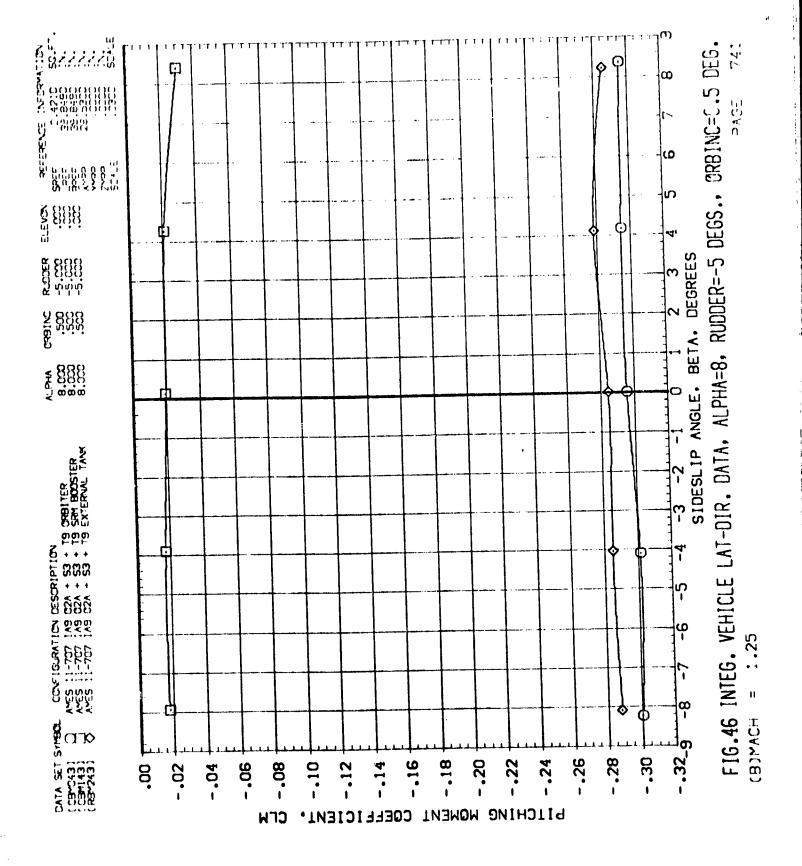


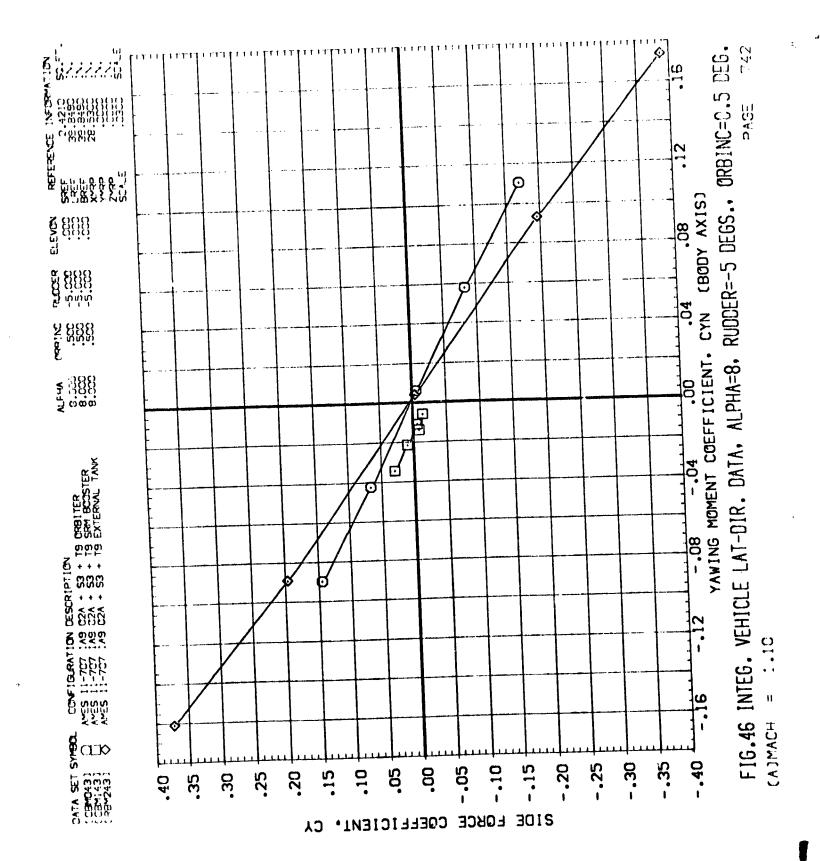


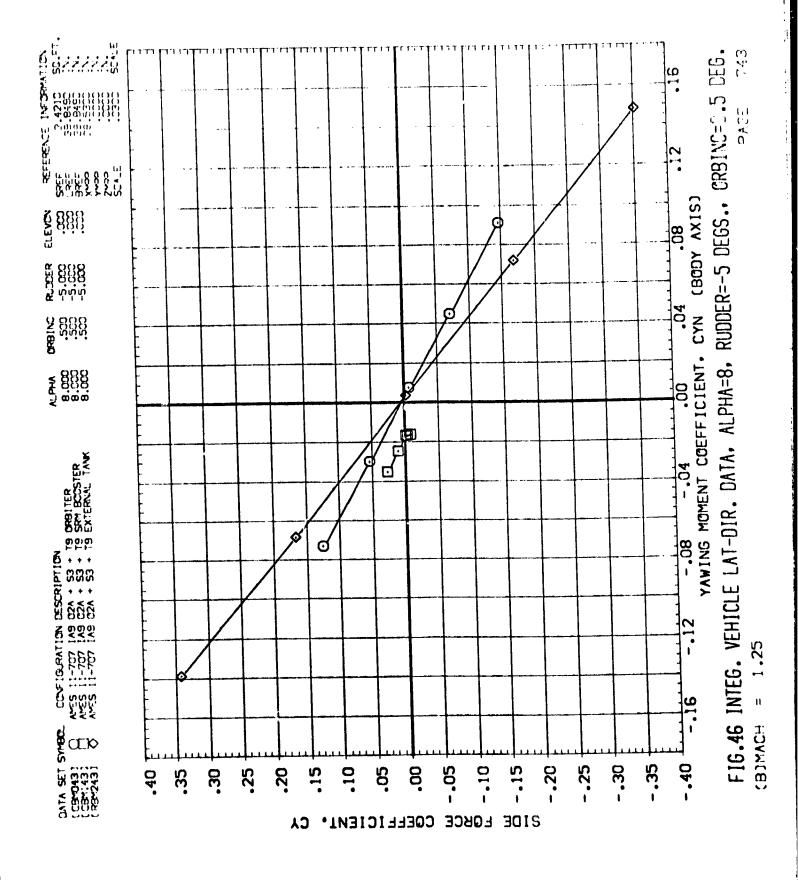
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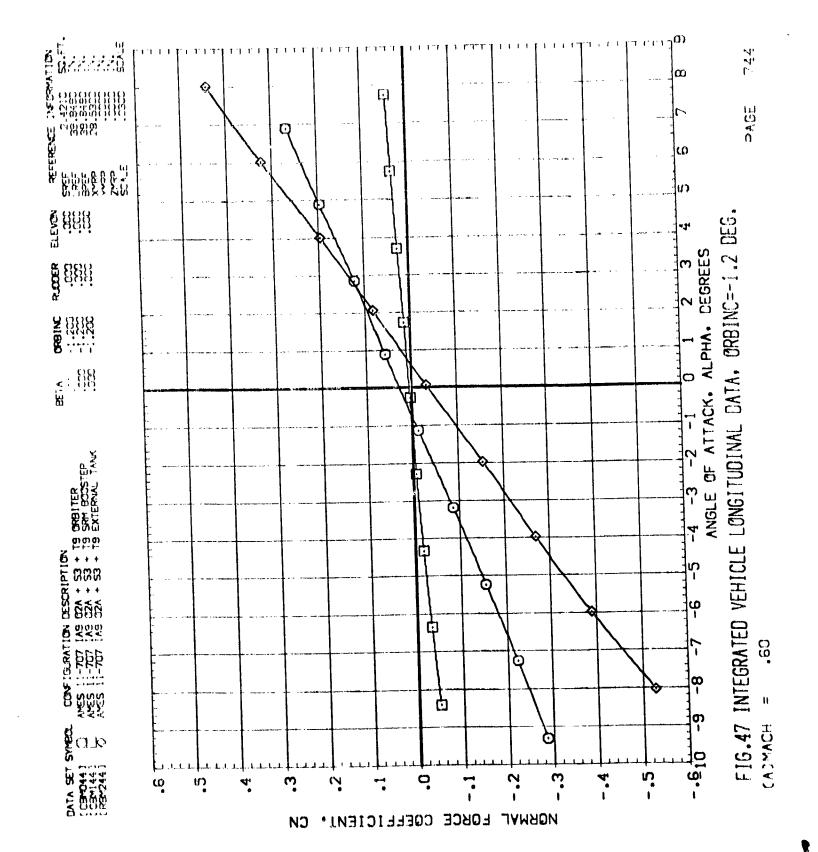


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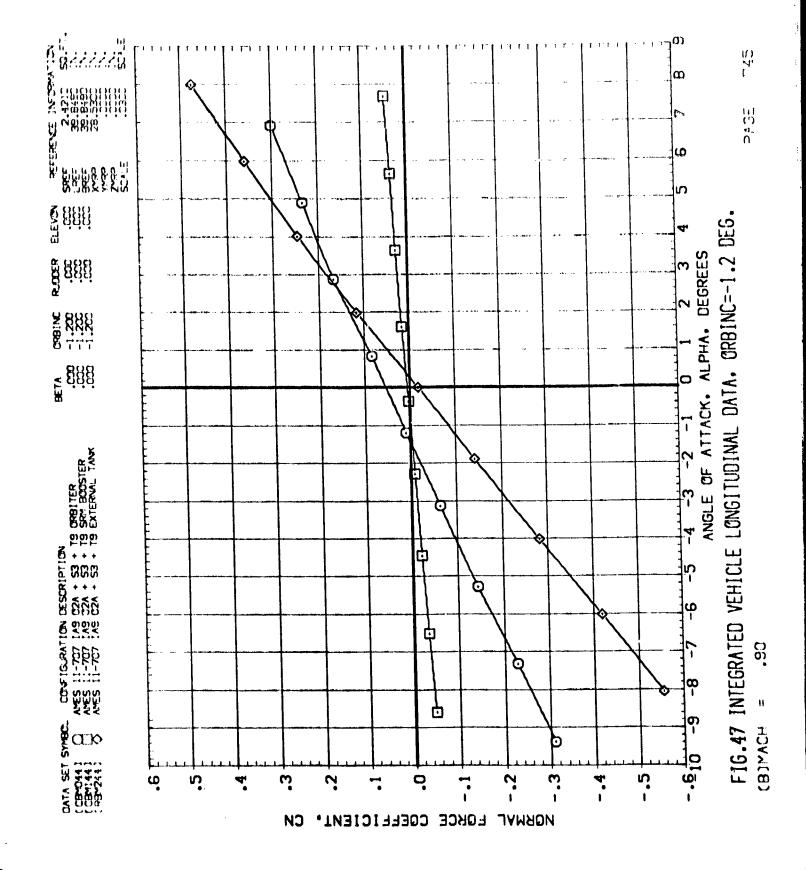


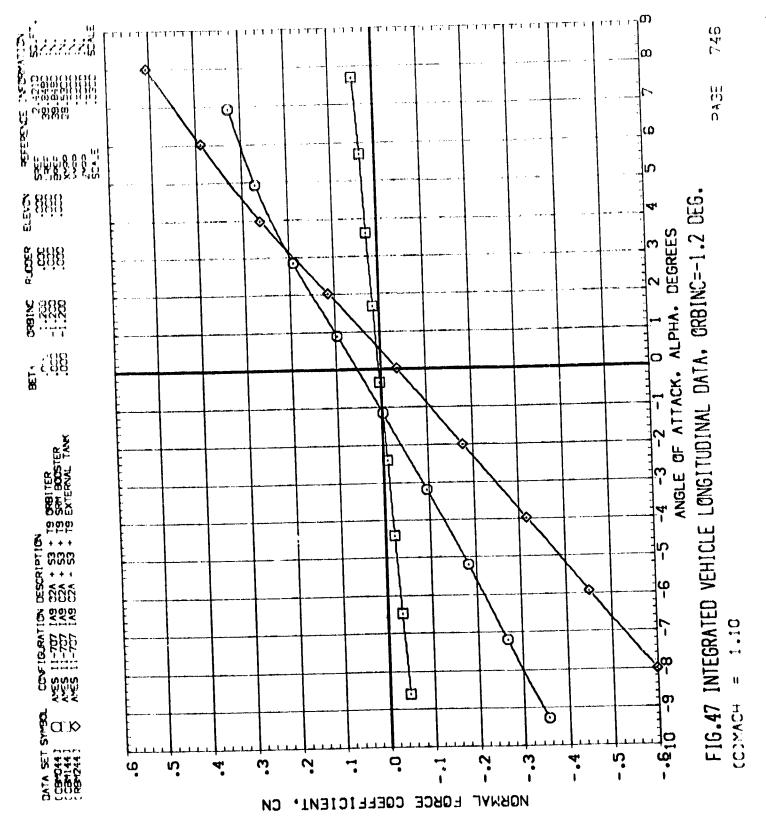


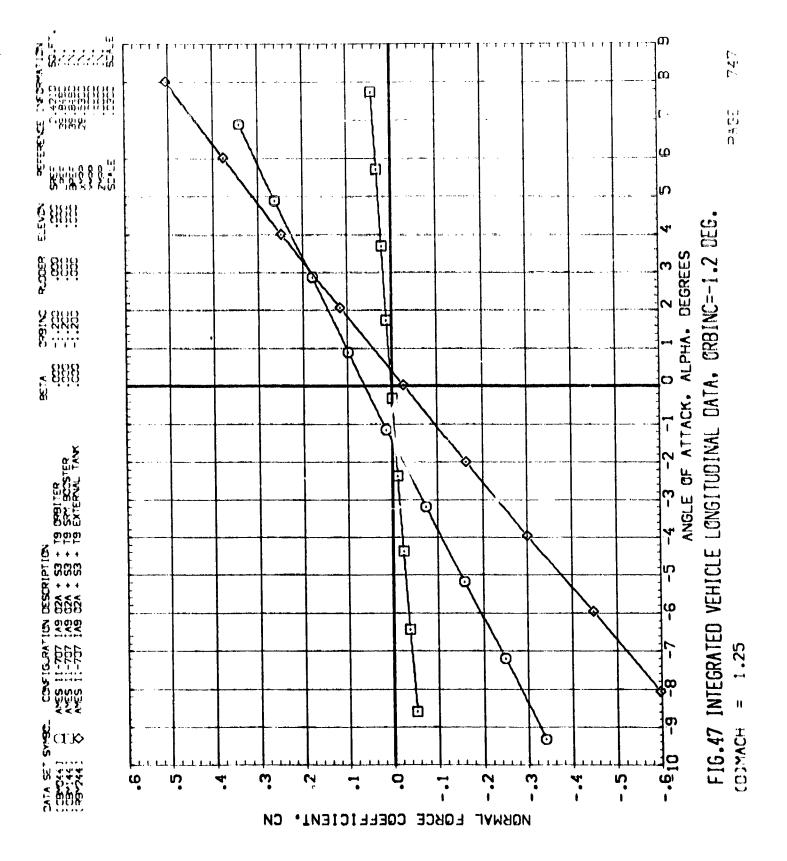


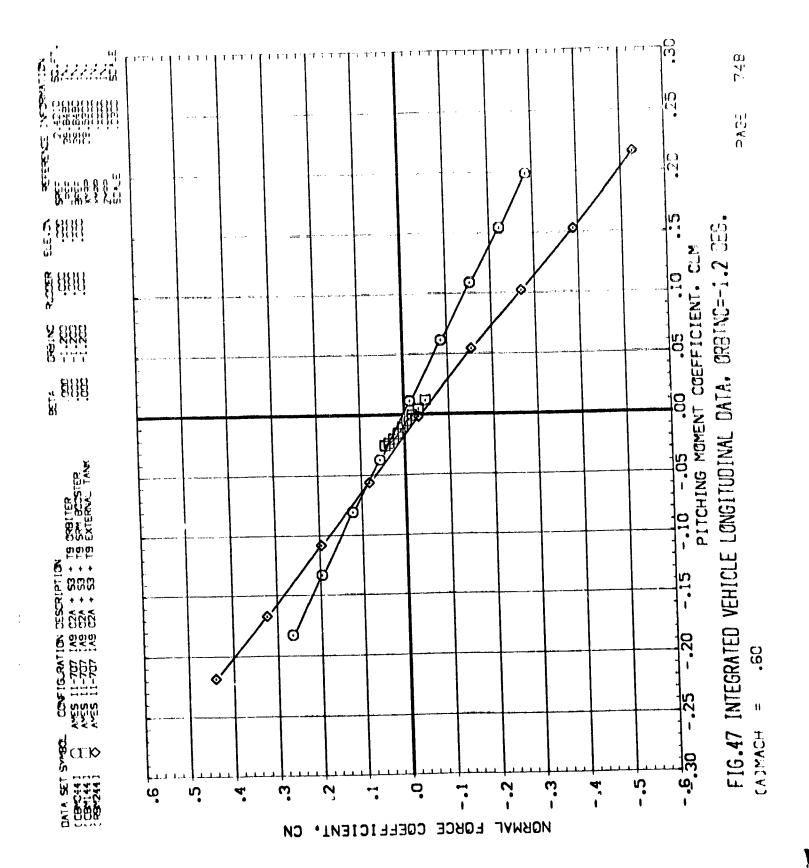
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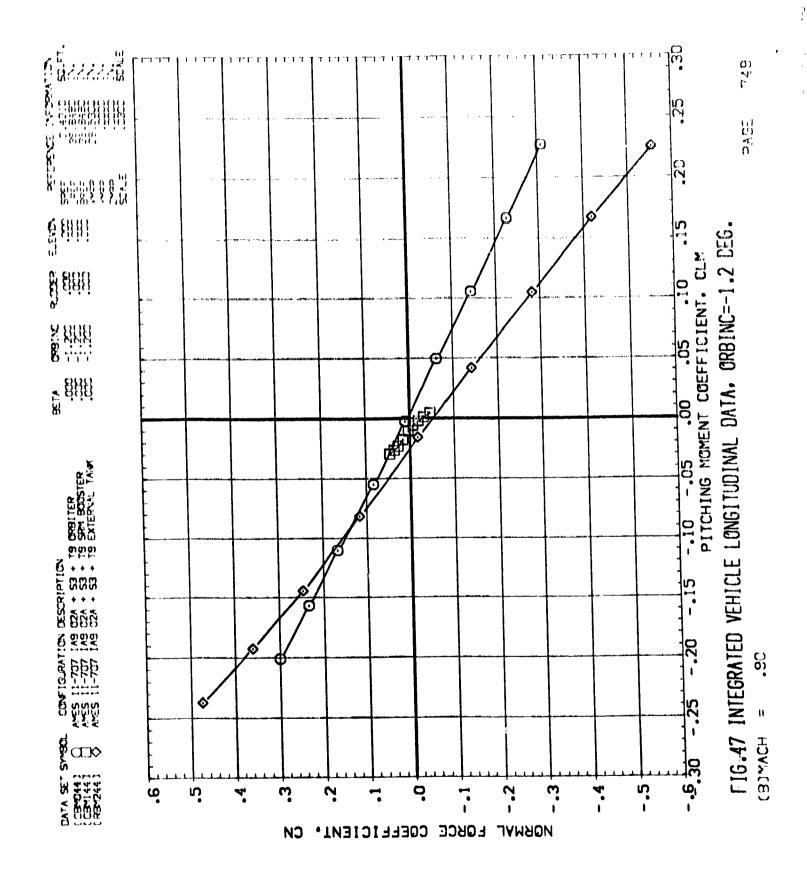


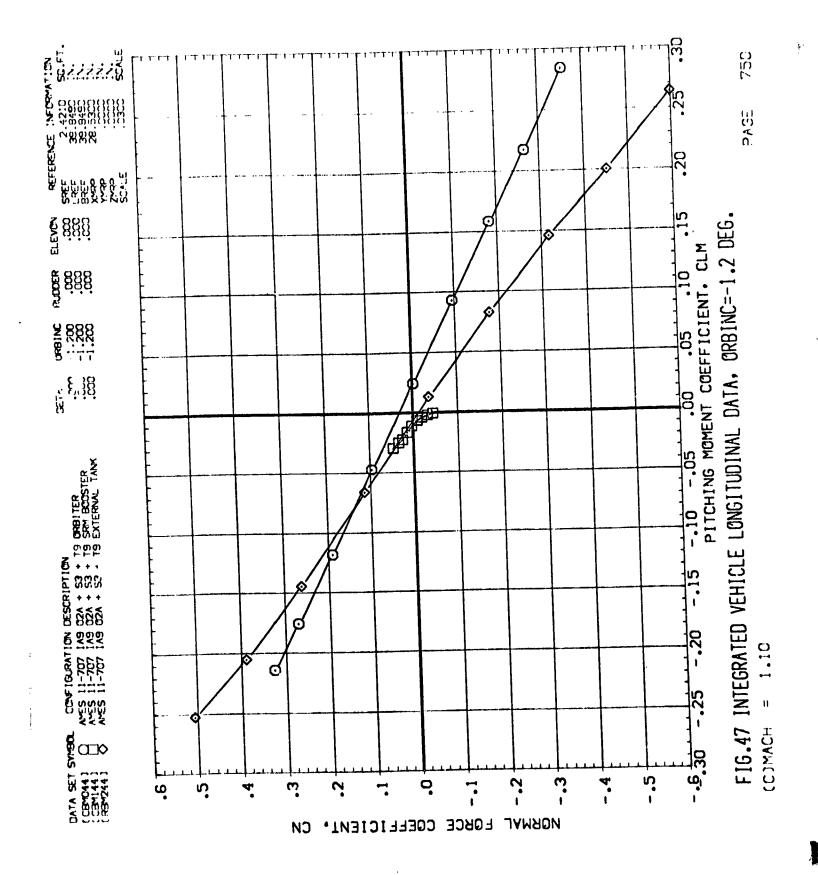






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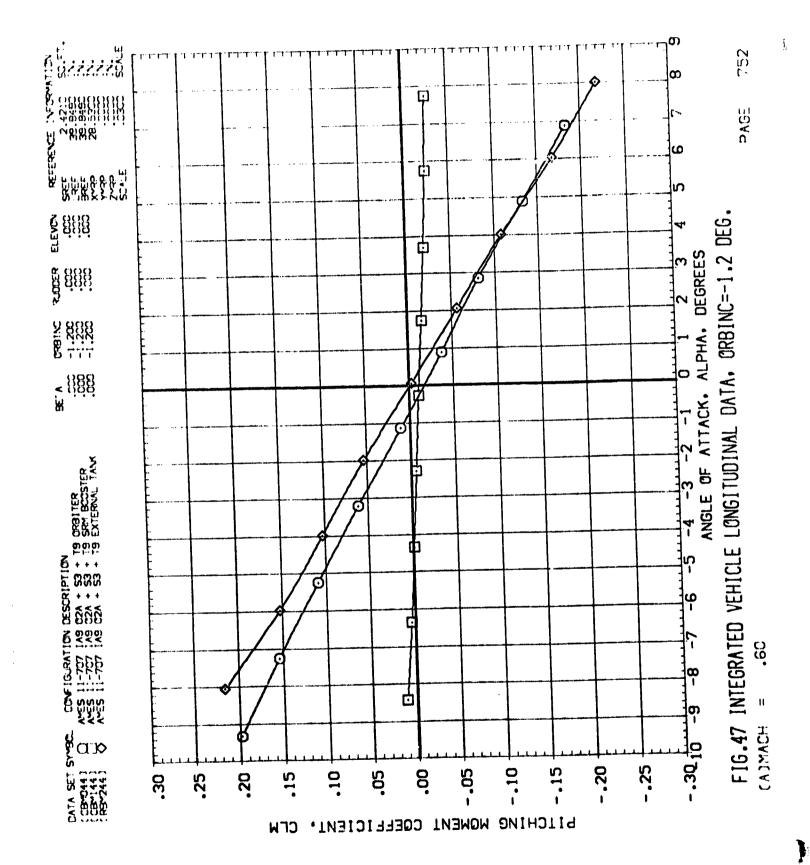




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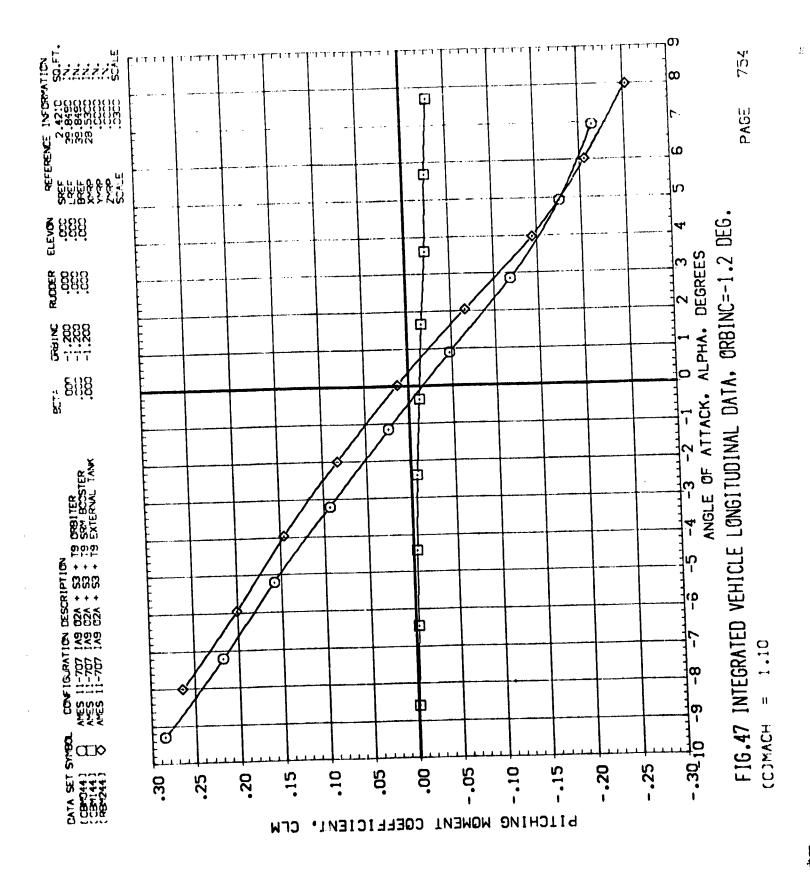
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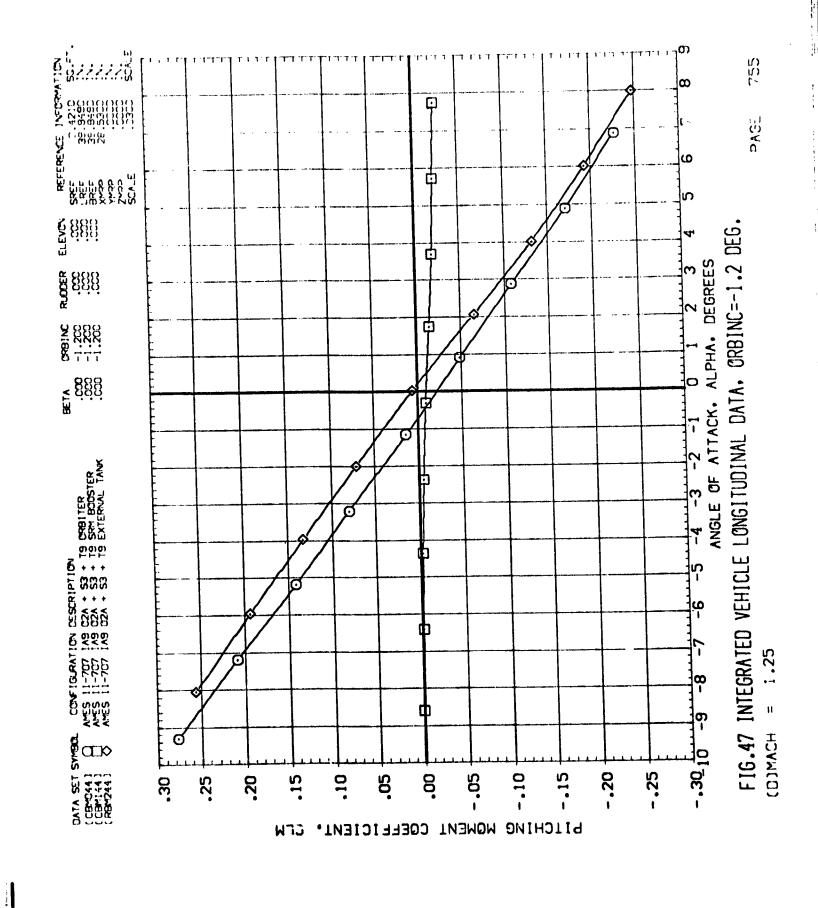


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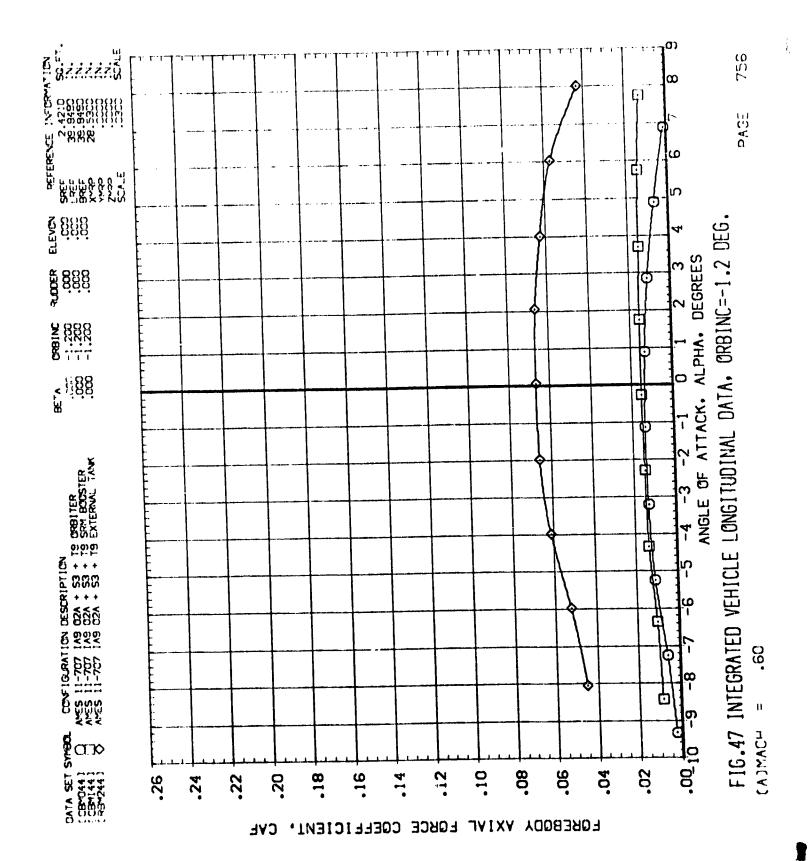
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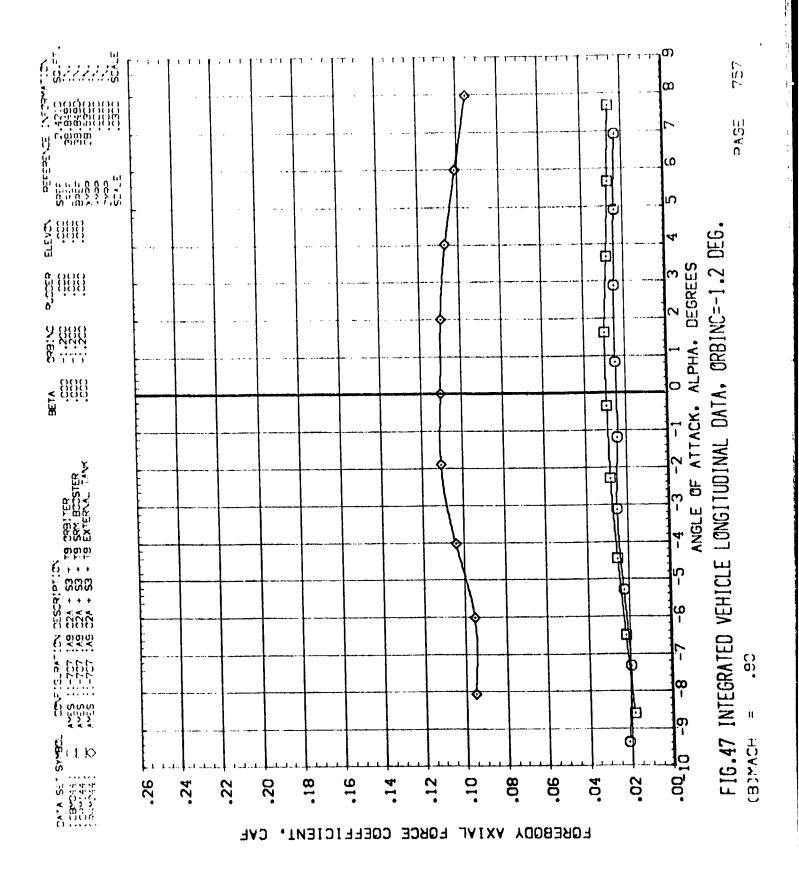
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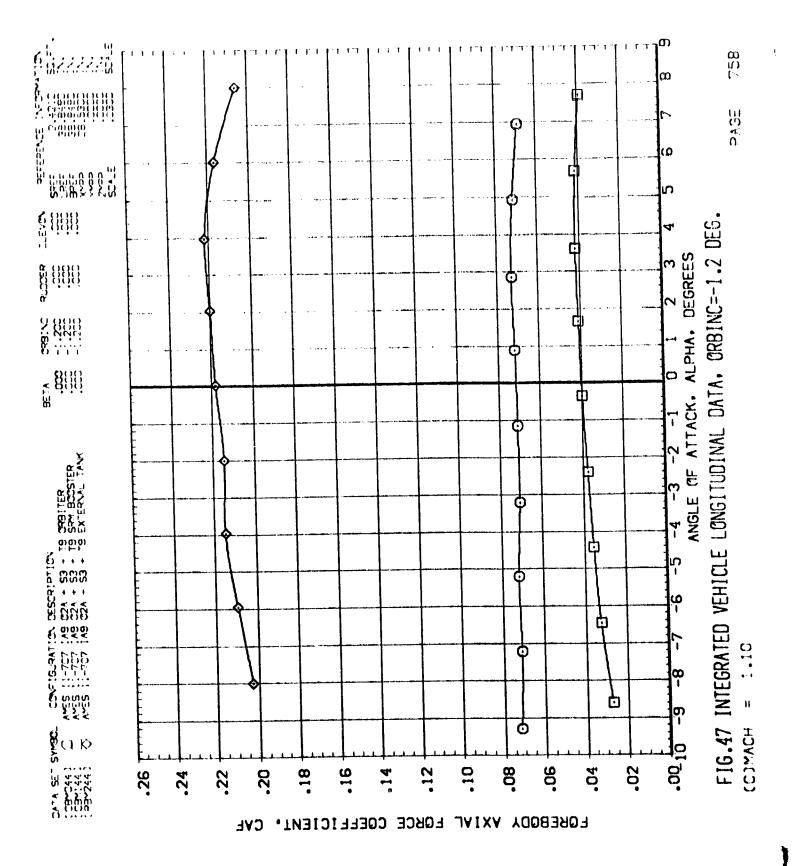




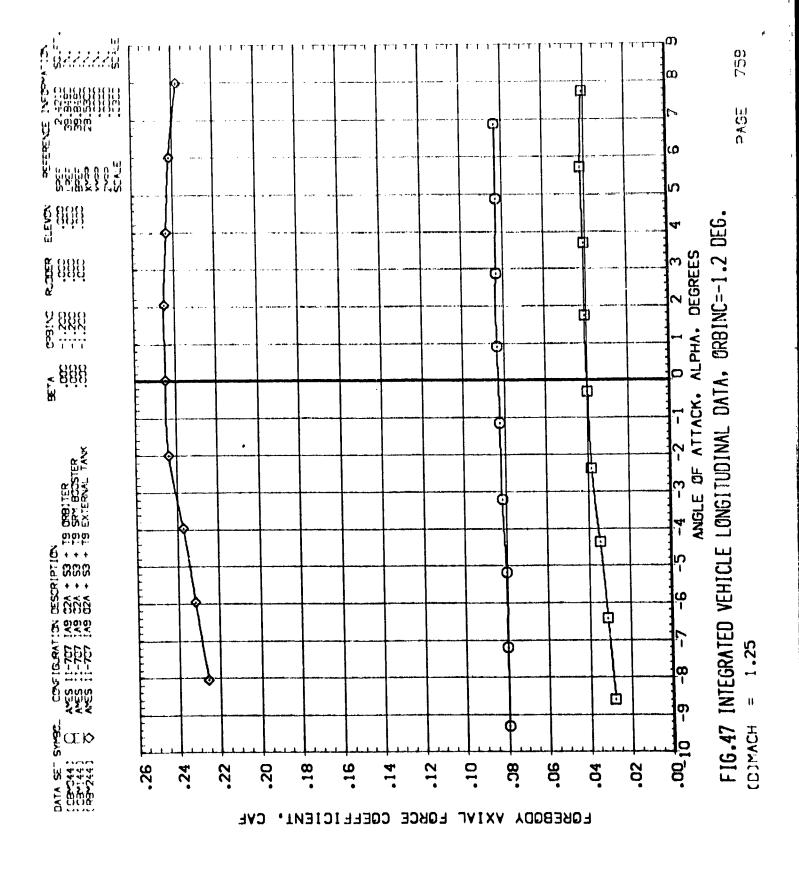
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APPENDIX

TABULATED SOURCE DATA

Plotted data listings available on request from the Data Management System.

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06.	-4.190	16100	COURT.	06670	06220	G 7	03719	.05740	.05190	-7.630CD	
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96.		16990	11530	.07459	06220.	00270	CORRED.	13120	.05160	-7.595.6.	
	6.380	16528	.11550	21770.	02220	G660C*-	.12720	19050	0.550	-7. Garage	
6	8,500	-,15000	GEEUT.	.581 6 0	.02450	-,00450	16160	C.C	98.20	985.20	
	CRACIENT	-,00038	02000	06021	91000	1917.47	31.50	C12:20:0**			
		RUN NO.	29/ G	RV/L = 3.99		GRADIENT INTERVAL	700*5- =	3.00			
				,		ŧ	2	ځ	8	APPR	
4 0	BETA	3	r C	5	1830	12:43	15660	33900	.06630	-7.68000	
1.101	-6.400	-,18200	.13650	13261.	00693	01750	12080	.18563	£6490°	-7,67500	
101.1	-6.280	1.1992	0.549.00	. 3670	06040	01270	08210	.12180	.063eD	-7.67mm	
C i	-4.160	6225	Copper.	03547	07360	02900	54160	.06190	.06180	-7.65530	
101.1	-2.080	-,636,50	OWE:	13520	.07430	00050	-,00030	G6000°	:06:30	-7.65mm	
101.		- C46010	. 7007	13450	024439	C6905*-	50000	-,56125	. nenga	-7.65000	
1.13	2.140	-,6335%		Campi	05220	51260	08145	12220	. 26139	7.672	
101°	4.2.0	1.522	1,6860	CORE :	57.73	01740	.12319	18573	.06130	-7.6e.re.	
101.1	0.00	00.000 T	00261	.13267	76997	-,02090	0.691	22845	. 6270	-7.6922	
H G H H	SANDIENT	9:00	11000	D'A13	\$1,555	-, 20352	65655	72895	00031	# P P P P P P P P P P P P P P P P P P P	

TABULATED SOURCE FORCE CATA-1A9A

2		98. 98.
(RBADOS) (11 MAY 75)	PARAMETRIC BATA	ALPIN = -6,000 O'BINC = RUDER = .000 ELEVON = RUDER = .000
AMES 11-707 149 CRA + S3 + TU OFBITTR		XMEF = 28,5300 IN. YMEP = ,0000 IN.
		p 11 \$
		XXXXX YXXX
	SFFIENCE CATA	2.4210 59.FT. 9.8495 IN.

	ALPHA -7.50000 -7.46000 -7.46000 -7.46000 -7.47000 -7.50000
	CABO .05440 .05420 .05410 .05320 .05050 .04940 .04940 .05090 .05090
9.00	CY .22220 .16860 .11480 .58000 -12090 -17190 -23110 -23110
/00*5- :	CYN14310119100766007680 .06030 .11140 .14780
INTERVAL = -5.00/	CBL .02619 .02093 .01450 .00740 .00730 .07509 .07509 .075590
GRADIENT	CAF .07360 .07420 .07410 .07780 .07780 .07780 .07780
8.8	CA .12820 .12820 .13977 .13977 .12870 .12740 .12880
S FAVL =	QLM 13180 14610 17810 17800 17800 18000 18000 13230
39/ 5	84444444
RUN NO.	ON 17600 19900 22902 27602 19700 19700
	9ETA -6.300 -6.210 -2.060 -2.060 2.120 4.220 6.320 6.320 6.320
	1.246 1.246 1.246 1.246 1.246 1.246 1.246

SKEF "
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SCALE "

2,4210 59.FT. 39,6490 IN. 39,6490 IN.

.NI 0000. .0000 IN. 19,3320 IN.

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CATE 28 SEP 73	_	TABULATED	TABULATED SOURCE FORCE DATA-1A9A	E DATA-TA9A						PAGE	•
			AVES 11-7	AMES 11-707 1A9 CRA + S3 + T9 CRBITER	SS + T9 C6	BITER			(RBMDD4)	CT TAN 21)	_
	BEEFBENGE CATA	Ę						PARA	PARANETRIC DATA		
		<u>.</u>					AI PRE	**	-6,000 ORBINC	11	8
SAE7 = 2.4		H GEN	26.5350 IN.	zi z			RUDGER			#	000
	39.8495 IN.	1 4342 2 486	.NI 0266.01	żż			RUCFLR	<u>چ</u> "	000		
11											
		RUN NO.	15/ 0 RN	RN/L = 3.99	GRADIENT	GRADIENT INTERVAL =	-5.00/	9°00			
			;	•	342	é	Š	Շ	COBS	ACAN	
H ON	DETA	8		09180	06100	01600.	12610	.19340	04970	-5.69000	
966.	-6.130	-,11305	02770.	.05310	01900*	00900	09460	34400	25.50	-5,67000	
9	-4.000	11150	09940	.05420	.00690	.00310	06220	0440	2	-5,66000	
865	-2.030	-,13100	.09250	.05360	07600	5 100.	Cesso.		04330	-9.67000	
9	236	13400	00\$60*	05350.	06010.	06000	00000	Cean	04240	-5,67000	
966	2,090	-,12900	06060*	.05230	06600	03350	0.8860	11290	CORPO.	-5.67000	
966.	4.155	11200	corre.	.05210	38600°	-,58,855	1000	-,16550	04360	-5,60000	
966.	6.220	11190	06740.	56995	0.0000	- 00810	14100	21540	(7697)	-5,69000	
\$65°	062.8	10605	. 17140	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	04020	66000	.01667	02519	-,000037	-,00049	
	GRADIENT	.0000	-								
		FUN NO.	E 5 /02	ENT = 4.49		GRADIENT INTERVAL =	-5.00/	5.00			
				į	Ų	ŧ	N.	გ	CABO	ALFHA	
MACH	BETA	3	ਰ	4	13861	COLOR	-,15500	.23140	£1584£1	-5,67000	
668.	-6.360	07100	. nd. 7	0.000	05830	00000	11890	.17610	07550.	-5.66000	
668.	-6.230	-,06400	.05630	0.00	CERCU	02220	08150	12020	00750	-5.6500	
669.	4.17	D8800	.5860°	08.20	0.520	08880	03670	.05640	.05040	-5.64192	
668°	-2.080	10600	00000	0.2480	02470	-,00190	00220	06230	01050.	-5.65000	
66a.	2,130	-1305.	00000	17.48G	.0228th	COSCUS	09390,	12320	CSS0.	-3.667.6	
. 699	4.240	03060*-	04.000 Ch. 900	0.320	05:50	00520	.12100	18060	.05520	-5.66:740	
e89.	6.350	00160	Cesser	08110	02500	00900"-	.15340	23295	.05610	1977 C C C -	
669.	CRADIENT	61000-	21000		(14.4712	-,00069	.01947	52879	- DESIGN		
		S. S. S. S. S. S. S. S. S. S. S. S. S. S	B 0 /08	FIV.L = 3.99		GRADIENT INTERVAL	/90'5- =	5.33			
						į	2	ځ	S	ALFHA	
₩ O	BETA	3	g z	ঠ	Ç.		- 14330	00122	02790	-5,60000	
1,096	-6.410	00260*-	:06840	.13210	136/407	00000	10000	16560	56370	-5.59000	
1°13		-,11270	ದಿವಿತಿಕಾರ್.	.13400	SELECT.	0010		.11919	.06360	-5.58.00	
1,098	4.17	1390G	. 19659	DISST.	06270.	53500	0.2980.	.05450	:1627	50025	
1.098		14900	11687	.1356	362/5	10 Mars -	08780	-,05750	.56010		
1,090		14600	11400		04400	115840 -	07460	11350	16.97	Charles &	
1,099		13400	1,0230		0.00	Daarn.	1137	17362	:06:36:	1000	
1,098	6.380	- 114 W	Control Control	CACE.	02690		.14500	22700	, ne. e	1	
1.096	6.527	୍ର ଓଡ଼ିଆ ।	THE STATE OF	10 King 1	62000	00317	.01755	02655	かいいと	0000000	
	GRADIENT	29:2:45	33.22.24	• • • • • • • • • • • • • • • • • • • •							

(RBNDDA) (11 MAY 73)

PARAMETRIC DATA

900

AMES 11-707 1A9 ORA + S3 + T9 ORBITER

REFERENCE CATA

-6.000 ORBINC = ,000 ELEVON = ,000 ALPHA = RUCCER = RUCCER = 28.5300 IN. .0300 IN. 10.5320 IN. E dbal 2.4210 58.FT. 39.6490 IN. 39.6490 IN. SAEF = CAEF = SCALE = S

	ALP4A -5.49000 -5.46000 -5.4700 -5.4700 -5.49000 -5.49000 -5.50000
	CABO .09310 .09320 .09240 .09260 .04980 .04980 .04980
3.00	.20970 .15780 .10990 .05710 1120 16040 11120
-9.90/	CYN -,13449 -,107269 -,03769 -,03769 ,07329 ,10260 ,13990
INTERVAL = -5.90/	CBL. .02730 .02180 .01520 .01520 03770 01560 02210 02790
CRADIENT	CAF -07570 -07660 -07780 -07810 -07940 -07940 -07960 -07800 -07800
RN/L = 3.00	CA .12860 .12960 .13020 .13040 .13040 .12940 .12940
9 /64	CLM .06960 .06960 .06460 .11010 .11010 .10010 .06760 .07560
RUN NO.	00 -,09400 -,11200 -,12400 -,14100 -,12600 -,11600 -,11600
	67.4 -6.310 -6.220 -2.140 -2.060 -2.110 -2.110 -2.110 -2.110 -2.110 -2.110 -3.110 -3.110 -3.110 -3.110 -4.1
	MO+ 1.245 1.245 1.245 1.245 1.245 1.245

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CATA-1	
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TABULATED SOURCE FORCE DATA-1A9A	

CATE ES SET 13											1
				BUTTER OF + 25 + 450 PAT CITE - 1 - 25.	8 6 5	\$1.15k			(REMODS)	(11 MY 73	A 73
			1 C J						ALDANGTON GATA	ATA	
•	REFERENCE DATA	7.									
							ALPHA	Ħ	000.1-	CRBINC =	ons.
t)	2.4210 59.FT.	1 4380X	20.5350 IN.	<u>.</u>			25			ELEWON =	Sic.
LREF = 39.1 EREF = 39.5	39.8495 IN. 39.8495 IN.	11 d34.2	10.3320 IN.	ż			2	אנ סי נא "	ž.		
SCALE = .	.0300 SCALE						1	8			
		RUN NO.	11/ D FN	FINT = 3.97		GRADIENT INTERVAL =	-5.99/	3.6			
			i	(34	ŧ	£	Շ	•		*
MACH	BETA	3	ð	5	07270	09000	.00420	00900*-			
966.	020°	00890*-	Casal.	08830	Carciaco	-,00590	00170.	10630			
\$65.	4.143	05190	05960	08180	09700	99749	27701.	-,15830		•	3 5
966.	6.210	04400	Cooperation of the cooperation o	Green.	00450	05600*-	.13530	20600		70 -5.0002	222
. 598	8.270 Gracient		-,00367	00051	00036	-,00119	.01621	-,02434	occi.		365
		RUN NO.	21/ 0 RN	RN1 = 4.49		GRADIENT INTERVAL =	-9.00/	9,00			
					(ŧ	2	Շ	3	ALPHA	¥
Č	AETA	3	ē	ঠ	3		C407	02130	.05650		999
9	-6.360	00900	08600*-	.08290	.02640	OSCO.	ORE	16730		70 -3.56000	000
904	-6.250	00600*-	00000	07670.	.02490	02/00	03220	11380		00 -3.55000	000
668	-4.160	01200	06500*	08770.	.02480	Cocca:	CASED -	05450	.05020		2000
668	-2.080	-,02900	.02140	.07470	.02430	OF COLOR	08980	05840			0006
6	2.120	02500	.01800	.07490	02920	00000	Carrier	11730	.05040	00072.5- 044	CCC
9	4.210	-,01600	CASCO.	07570.	.02530	- , conso	11450	07071-			2000
	6.320	01300	.00540	.07740	.02610		05.74	22240	.05550	30 -3.57000	2000
9	6.430	00400	00790	.08050	.02519	-,00000	298.0	02746	٠		00191
	GRACIENT	-,00019	10000.	-,00019	.00013	-,00000					
		RUN NO.	31/ O R	RN/L = 3.99		GRADIENT INTERVAL =	-5.00/	8,00			
				;	ָרָבָּינ ָ	ē	Š	Շ	•		ALPHA
	BETA	3	3	5	1	12540	13260	C85CZ*			-3.61000
1,100	-8.450	01100	008:4	.13170	06000	0000	-,19150	15490		.nezzo -3.6	-3.61000
1.190	-6.280	03100	.02460	13300	Genta.	00110	00990	1,10090	00690*		-3.61000
1,100	21.12	05300	.04400	13400	08070.	COSTO	03320	.05130		.06230 -3.5	-3,59000
1,120	-2.080	00690*-	.05730	13380	6000	02200	05130	04890		.00000 -3.5	-3.59000
1,190	2.130	06400	.05370	.13210	122/13	0.000	02990	-,10240		.06000 -3.6	-3,60000
100	4.240	-,05500	07830	.13190	orzano.	0.000	05201).E- 00980,	-3,61000
267	6.350	00950*-	.028 <i>2</i> 0	.13200	00570	00030	13410			.05920 -3.6	-3,62000
00.	6.999	-,01000	09900*	.12940	CZCLG.	016201-	1364		ee0000*- 0		\$6000
•	10010101	ACOUNT.	02000	00028	A10.70	00001					

AMES 11-757 1A9 C/EA + 53 + 79 ORBITER

(KB)(COS) (11 MAY 79)

PARAMETRIC DATA

900

-4.000 ORBINC = ,000 ELEYON = ,000 ALPHA = RUCOER = RUCPLR = 28.5300 IN. .0000 IN. 10.3320 IN. GETTERNE BATA 2.4215 SQ.FT. . NOOD SCALE 39.6490 IN. 39.6490 IN. LREF = EXTS = SCALE = Dys.

-3.46000 -3.47000 -3.47000 ALPHA -3,48000 -3,47000 -3,48000 -,00000 -3,47000 CABO .05350 .05260 .05200 .05200 .04870 .04870 .04850 .19900 .14960 .10290 .05530 -.09990 -.14800 -.20310 41/ 0 RNL = 3.00 GRADIENT INTERVAL = -5.00/ 5.00 CYN
-,12650
-,09580
-,06690
-,07690
,03270
,06440
,06440
,12810 CBL ...72840 ...1610 ...1610 ...10860 ...1620 ...102890 .07630 .07630 .07670 .07670 .06140 .06240 .06090 .06090 CA .12980 .13130 .13100 .13340 .13170 .12940 .12760 -.00022 CN -.00900 -.02800 -,03900 -,05300 -,04100 -,03300 -.01500 RUN NO. 9ETA
-9.320
-6.230
-4.140
-2.060
2.100
4.190
6.280
6.280 HACH 1.245 1.245 1.245 1.245 1.245 1.245

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CATE 28 SEP 73		TABULATEE	TABLLATED SOURCE FORCE DATA-1A9A	E CATA-1A9A						PACE	.
			AMES 11-7	AMES 11-707 1A9 OEA + S3 + T9 ORBITER	SS + T9 G	281 TER		5	(REMEDOS)	(11 MAY 73	_
_	GFFFFWE SATA	4						PARAM	PARAMETRIC DATA		
							76.0	**	-2.000 ORBINE	•	8
		11 14 de 2	28.5300 IN.	żż			RUDGER	41	.000 ELEVON =		000
LAET = 39.	39.8495 IN.		19.3320 IN.	ž	•		REPLY	91	900		
) 											
		RUN NO.	12/0 13	RW. = 3.97	GRADIENT	GRADIENT INTERVAL =	-9.00/	9.00			
			;	•	ÇVE	현	Š	Շ	8	ALPHA	
MOM	BETA	5	5	5	00460	09900	11460	.17420	0.04620	-1,60000	
999	-9.200	0.530	C3010	05250	00000	.00746	-,08640	13120	04490	-1.59580	
66. i		00000	07700	.05440	.01139	.00440	05610	.06490	erese.	- \$0000	
665		00.00	99166	.05540	.01270	.00230	02650	09076	27280	COUNTY TO	
8F.	060.0-	COPOL	.00519	.05580	.01300	060000*-	.00410	06600	00000	1.59000	
660	200	00100	00100	.05440	.01130	-,00415	.03550	06200*-	OKE TO	-1.60000	
66°	2000	00110	07700	00880.	CT600.	-,00550	02790.	-,1996		-1.6000	
666.	8	00610	51245	.05110	.00719	00760	18760	10100	OKES!	-1.60000	
£ .	200	00920	02190	01690.	.00270	00920	.12760	-,19300	7000	76000 -	
eec.	COACIENT	61006	10000	00018	-,00022	00127	00610	-, uccoc			
		RUN NO.	22/ D RG	RWL = 4.49		GRADIENT INTERVAL =	-5.00/	8.00			
						ŧ	2	5	CABO	ALPHA	
-CAN	BETA	8	ð	5	3		13947	.20610	.05660	32000	
8	-8.390	.13800	-,10310	07970.	01620.	0,110.	0900	16170	.05360	-1,56000	
106	6.273	00090	04560	.07800	.02440	00000	00220	10745	.05160	-1.55000	
\$	-4.160	00980.	-,04319	.07680	.02520	0890	00010	0000	54800	-1.54020	
	-2.060	00690	0.03070	.07549	.02740	00100		04480	04810	-1.54000	
ī. i		0.0840	03370	09520.	.02550	00300	.03420	01160	tucs.	-1.56220	
	7 240	02450	04040	.07380	.02380	00600	0000	10000	04400	-1.56000	
	02.5	00880	-,54450	00970.	.02400	00850	19750	-,19863	09550	-1.56000	
, §	8.430	.07300	-,05790	07840	.02280	086.70*-	14110		21000-	36000	
	GRACIENT	24	.0001	00037	-,00022	00127	ar m				
		Q Z	32/ O R	RN/L = 3.99		GRACIENT INTERVAL =	-5.00/	9.00			
						ŧ	2	Շ	CABO	ALFHA	
100	BETA	3	ਤੋ	5	1 P	12690	12050	07691.	.06340	-1.50000	
101.1	-8.410	00940	05830	13151	01000.	0000	0350	14390	02890*	-1,50000	
101.1	-6.280	00660*	04180	.13350	06070	00320	- 06040	08860	06290	-1.51000	
101.101	-4.17	.03800	02530	.13340	CEONO.	00000	10000	00690	.06120	-1.49000	
101.	-2,070	00620.	01560	.13300	1812G.	Contract.	0.750	0.04360	08680.	-1,49000	
	2.130	9062U*	-,01630	.13130	.57150	1.1930	37,30	Corpo	08980	-1.55000	
	4.230	ogzeg.	92430	.13230	05220.	01670	296CU.	12655	G\$940	-1.51932	
	6.340	20530.	03730	.13100	.07160	52230	00200	- 12070	02650	-1.51000	
101.1	6 497	COLLEG	-,05430	.12880	00690*	02710	12390	361611	68000	\$6000	
161.1	C.C.A.C.I.C.M.	อังเมอ	90000	6:0000*-	.00013	00388	.01408	-,022.0		, , , ,	
	: 111	•									

A. 44. B.K. 1

(RBHDD6) (11 MAY 75)

	6 6.00	
DATA	ORBING & ELEVON =	ALPHA
PARANETRIC DATA	.000 .000 .000	CABO . 0523 . 0533 . 0513 . 0484 . 0486 . 0486
PARAN	ALPHA = -2. RUCSER = .	5,00 CY .18730 .13980 .09780 -,04650 -,14080 -,14080 -,14080
	A 35 55	-5.00/ CYN 11620 06310 03400 .03200 .03200 .03960 .03960 .03960
		CRADIENT INTERVAL = AF OT890 OBSO
		0
	i i i	CA .13190 .13390 .13490 .13490 .13129 .13129 .13119 .12989
	28,5300 IN. ,0000 IN. 10,3320 IN.	42, 0 42, 0 7 4 42, 0 7 4 42, 0 7 4 42, 0 80.4004.4002.4003.2003.2004.070051.50
\$	XXXX III	ON NO. OBOUD0650006500041000440004500045000600006139
Area Park	2.42:9 33.FT. 39.6459 IN. 39.6459 IN.	957A -6.230 -6.230 -4.130 -2.100 -4.190 6.280 6.280
	SAEF = 29 LAEF = 39 BREF = 39	MACH 1,246 1,246 1,246 1,246 1,246 1,246

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		TABULATED	SOURCE FOR	TABULAYED SOURCE FORCE BATA-1A9A						PAGE	S
CAIL to SEL 13			AMES 11-	AMES 11-707 1A9 CRA + SS + T9 CRBITER	5 + 3	101 TER			(RBMDOT)	(11 MAY 73	~
1	1	:						PARA	PARAMETRIC DATA		
œ	REPERENCE DATA	4 .					i		CEBTHC	Ħ	8
940 = 2.4	2,4215 59.FT.		28.5300 IN.	ž ž			RUDDER	, "			900.
	39.6495 IN. 39.6495 IN.	7767. 276.P ::	10.3320 IN.	żż			RUCFLR	<u>"</u>	900:		
	.0300 SCALE										
		RUN NO.	13/0 8	KN/L = 3.97	GRADIBAT	GRADIENT INTERVAL =	-9.00/	8.00			
		i	2	3	3	현	£	Շ	CABO	ALPHA	
HOYN	BCTA		5	04690	07500.	06600*	11610	.17530	02950	0000	
795	-6.130	00570.	0.05070	06060	09900	02900	0.0990	0.0001	0.000	00022	
104	-4.150	00690	04619	.05360	06600.	.00580	0.750	2000	04230	00023	
795	-2.040	00000	D411D	.05440	.01210	06200		Chem.	04240	00022	
165	620.	06200	04260	.05460	2216.	00000	GESSO.	04930	04240	22200	
766.	2.070	00860.	03790	.05340	mania.		06400	09530	.04350	.21000	
766.	4.130	.06600	54490	20162	00000	- מינופיים	09350	14949	.04540	21000	
166.	6.195	00210	-,05100	200	2000	00000	.12460	18795	.04630	.2100	
766.	0.250	008800	0644B		00022	00158	.01487	-, 92232	**************************************		
		9		RV1 = 4.49		GRADIENT INTERVAL =	-5.00/	9,00			
						ę	2	ځ	8	ALFHA	
Ž.	BETA	ð	Š	5	3	g 8	- 14700	09602	.05470	.23000	
0.6	-8.360	.14900	10450	.08010	.02540	Gile.	Contract of	16140	.05360	.23000	
0.6	-6.275	.12600	00260	.07650	06220*	OCEUC.	07470	31000	05150	.23500	
G196.	£1.12	32000	00980	07580	12620	CHSHO	03510	.05350	.04760	.2000	
906*	-2,080	10500	07215	09670	52570	00110	CLOGG.	09000	02720	25000	
QU6.	910	.19899	03630	03170	.02445	20380	03220	04819	.04739	.24000	
256.	2.110	. 11000	06080	06170.	.02140	-,95749	08690*	10200	08080	04000	
S 8	217.2	12390	C68893*-	.97430	0.72273	01020	10370	15410	0.4450	22.00	
5	6.410	13800	10170	02920	02220	01100	13561.	00000	10000	0.000	
	GRACIENT	-,00005	00000	-,00047	60,00	(2)169	06010.				
		RUN NO.	33/ 0	RWL = 3.99		GRADIENT INTERVAL =	-5.007	3.00			
			:	į	ų.	€	Š	Շ		ALPHA	
#O#	BETA	5	¥ 5	4) ·	06990	.02820	11380	.18020		25000	
1.120	-8.400	.14550	00340	13180	0690	.02339	-,08850	.13670	•	.25000	
1.100	-6.270	13555	1.08173	13270	08070	.01690	05629	04740		25.55	
1,100	K1.4-	0.000	07310	.13249	07170	12820	(1276)	.04310	14.25	(A) (A)	
1.130	0/0.7-	00701	97435	.13990	02220	01030	.02700	-,54320	Crace.	2477	
201.1	4.240	.11200	97970	.13200	.07153	51835	. 558 6 0	06261;-	CECOS.	.25090	
001.1	6.350	.12670	06060***		07690.	-,52496	19060°	- : 3780		25300	
1.100	8.47)	.14399	-,10500		£76770	1.02880	61353	02126	'	00143	
1	STASIENT	00024	.00013	05014	60000	9	1				

(11 MAY 75)

PARANETRIC DATA AMES 11-707 IA9 OEA + 55 + T9 ORBITER

66.	
	20008; 0008;
CLEVON =	
900. 900. 900.	CABO .05330 .05310 .05310 .05310 .04690 .04690 .04690 .04690 .04760 .04760 .04760
999	CT. 13820 19820 19820 19920 19990 19990 19990 19990 19990 19990 19990 19990 19970 19
# # # # # # # # # # # # # # # # # # #	7771. 09280. 09280. 09280. 09280. 0771. 70. 72. 73. 74. 75. 76. 76. 76. 77. 77. 77. 78. 78. 79. 79. 79. 79. 79. 79. 79. 79. 79. 79
599	CTN -,11130 -,08370 -,08340 -,03340 -,03100 -,01000 -,01000 -,01000 -,01000 -,01000 -,01000 -,01000 -,01000
A Ri Ri Gadient interval = -5,997	AF CBL 07975 .72527 061475 .72527 061695 .01629 0639000640 0639000640 0639000640 0639000290 0614002290 06003400299 0622002290 0919001460 0919001460
GRADIENT	CAF .07975 .06145 .06145 .06160 .0640 .06290 .0640 .06140 .06140 .06140 .06140 .06140 .06140 .06140 .06140 .06150
IN. IN. IN. IN. SALL = 3.00	
28.5300 IN. .0200 IN. 15.3320 IN.	
1942 H	ON
REPERDICE DATA 2.4210 30.FT. 39.6490 IN. 39.6490 IN0305 SCALE	9ETA -6.329 -6.239 -2.360 -2.360 -2.360 -2.360 -3.399 -3.399 -3.399 -3.399 -3.399 -3.399 -3.399 -3.399 -3.399 -3.399 -3.399
A 60 00 00.	1.249 1.249 1.249 1.249 1.249 1.249 1.249 1.395 1.395 1.395 1.395
SCALE SCALE	•

247E 28 9EF 73		*ABIALATEC	*ABLLATEC SOJECE FORCE DATA-1A9A	E CATA-149A						PACE 119
			INES 22-7	WES :1-737 IAS ORA + 53 + 79 ORBITER	SS + 79 C	RBITER			(REVEDO)	(11 may 73
"	SFFFFERE CATA	7						FAR	PAGAICTRIC CATA	
_				;			ACPHA	11	2.500 CGBINE	¥
2.5 = 73.2	2,4210 59.FT.		26.5350 IN.	z ;			RECOR	#		E. NOVAL
0	39.8495 IN.	7.96.F	.N. 5322 IN.	żż			ALPOUF.	<u>"</u> څ	986	
SCALE = 39.0	OSCO SCALE		•							
		RUN NO.	14/ G S	EW. = 3.99		GRACIENT INTERVAL =	-5.29/	5.96		
		i	3	ð	3	e	Ē	ፘ	3	A.P.W
Đ.	BETA	5	5	CAAAG	-,99320	01110.	10920	.16090	.04570	2.5000
66 .	-6.190	2001.	- 40200	54670	02800	C660G*	-,06200	1229	. D4055	2.5365.5
8		1480	G#860	00060	61700.	.00620	067.6	07940	06290	22266.2
66.		1	59145	05000	06800	00000	0697	Con l	19190	2000
666.	120	3906	09185	060\$0*	03600	-,90075	01210	- 95261		2 447
£ 9	1000	13600	-,09050	09670	21100.	00430	.03139	94619	0.00	2000
666		14300	59745	.04830	.00520	00660	26030	200	01640	
66: F	6.183	15600	-,19900	.54580	.00100	00915	1906G	13500		(
	8 243	17500	12540	.04320	-,90360	51100	1200	-185.60	STATE OF	10,414
667.	CRADIENT	econo	41000.	-,00020	00025	00158	.01376	2000 -	e section	
		RUN NO.	24/ 5 R	RWL = 4.30		GRACIENT INTERVAL	-5.90/	9.30		
			į	t	367	•	Ē	Շ	8	APPA APPA
MACH	BETA	3	5	5	2.000	19230	13645	30030	G1880.	2.64300
236	-6.340	CC222.	16095	COLUC-	Corre	51175	19529	.15330	05350	2,55000
236	-6.290	20300	14530	0.000	19620	2000	D9695	8161	09060	2.5800
57.6.	F1.17	19600	13760	06570.	2000	Lakeda	93185	07720	0.0000	2.5920
206.	-2.075	.18500	12685	24140	מאיסני.	0.000	.03270	-,54790	97.50	2.58000
206*	2.115	30781	16919	00110	0.120	09900-	1368 FI	C3663	01050	2.66030
206.	4.195	1961	-1381	19940	01610	0.0000	19:20	05877*-	.05290	2.657.0
206.	6.300	2000	19696	02520	.02150	-,015385	13290	16861°-	Service.	2.53330
206.	8.410 GEADIENT	60000	00516	22100	61000-	21:00'-	51632	12381	2000-	L Land
		FUN NO.	34/ 5 R	RVL = 3.99		GRADIENT INTERVAL	/60*5- =	5.95		
				,	Ų	ë	Š	Š	CABG	AL PLA
NA ON	BETA	3	ð	5	1000	Catalon	-15750	1718	0 000 0	2.61TED
101.1	-8.395	.24400	17620	2557	00000	1247	1838B	PROPERTY.	06130	2.62000
101.1	-6.285	23200	1669	13061	THE SECTION OF THE SE	0.57.50	GERRO -	36365	E835	2.63@D
101.1	-4.185	.22500	16230	caisi.		EL STATE	-,52639	54185	£6135	2.7.20
101.1	-2,000	22.00	15750	13261	20110		138.00	CERRO.	Santa.	2. 7.7.5
101.1	2.125	£1900	2.157.E	13180	1707.63	CON CO.	05115	08133		2.63.T
101.1	4.220	325XX	:5900	13151	03030	Detector -	D. B.	1362	25.30	2.53.72
1.19	6.322	£229:00	- 16395	0.627	CE COLOR	DECEMBE.	10453	5:1:2		(£3.£3.2)
#G#*#	9.465	.24300	100.7 Z	617200	17.211.0	00641	.51231	-,01952	450,20	
	GRACIENT	0032	40 mm	4						

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TABLELATED SOURCE FISICE BATA-1A9A

C ST TAN EL . BESTELLE

PARAMETERS CATA

AMES 11-757 IA9 (20A + S3 + T9 CHBITER

	H H		2.6190 2.6190 2.6190 2.6190 2.6190 2.6190 2.6190 2.6190
•	2,000 0000 .000 0000 .000		CA80 .05356 .053240 .052240 .05256 .05356 .15166 .15166
A Triangle	RIDEOR = 2.0 RIDEOR = .0	2.90	
	≰ 1% 6%	-3.00/	0.501. 0.501. 0.500. 0.500. 0.000. 0.000. 0.000. 0.000. 0.000.
		GEACIENT INTERVAL =	60. 60. 60. 60. 60. 60. 60. 60.
			CAF .04020 .04010 .04010 .04010 .04000 .04000 .04000
	żż	RVL = 3.00	0.000.000.000.000.000.000.000.000.000.
	28,5355 IN. .0505 IV. 10,3356 IV.	6 /99	QM -,13379 -,15279 -,15279 -,15989 -,15939 -,15939 -,17799
4	12 12 14 14 14 14 14 14 14 14 14 14 14 14 14	RUN NO.	00122. 201623. 201623. 201623. 201623. 201623. 201623.
GFET SATA	2.4215 53.FT. 39.6405 IN. 39.6495 IN.		# PETA # -6.320 # -2.060 # -2.060 # -2.060 # -2.060 # -170 # -170 # -170 # -170 # -170 # -170 # -170
	SCAR III		1,246 1,246 1,246 1,246 1,246 1,246 1,246

CATA-TA9A
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SOURCE FORCE :
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5		0.00 0.00 0.00 0.00
(ASSESSED A 12 MAY 75)	PARANETRIC DATA	= 4,990 GEO ELEVAN = 1 200 ELEVAN = 8 R = 1990 GEO ELEVAN = 8
UMES 11-707 1A9 CBA + 53 + 79 CHBITER		SEET = 2.421G 59.FT. YORF = 28.590G IN. LECT = 39.8420 IN.

7. CADO .19620 .24530 .11520 .24530 .07420 .24530 .07620 .24530 .97620 .24530 .97620 .96230 .97620 .96230 .17730 .96230 .17730 .96230 .17730 .96230	5.00 CY CABO .19320 .05120 .14520 .05120 .09580 .05120 .04580 .04720 -,16200 .05100 -,16200 .05100 -,16220 .05200
	-5.007 CNN1316010010000100000100000100000100000100012667301559
CAACIENT INTERVAL = -5.007 AF CR. CR. CYN COSAO	GRADIENT INTERVAL = JAF CBL 151960 171259 172340 171099 172470 170690 172470 170690 172590 170690 172590 170690 172590 170690 172590 170690 172590 170690 172590 170690 172590 170690
CAC 1.00540 1.00540 1.00540 1.00540 1.00540 1.00540 1.00540 1.00540 1.000000 1.000000 1.000000 1.000000 1.00000 1.00000 1.0000	
604 = 3.98 C4 D4 D4500 D4500 D4500 D4500 D4500 D4500 D4500 D4500 D4500 D4500 D4500 D4500	8VL = 4.09 CA .97460 .97460 .97460 .97129 .97129 .97249 .97470 9918
15, 9 (21) CAM1631915990149901499014990149901499014990	25/ 0 QLM 19460 18550 18550 1870 19950 19950 19950
ON CON NO. CON CON CON CON CON CON CON CON CON CON	CN CN CN .2.79999 .2.65999 .2.65999 .2.55999 .2.55999 .2.55999 .2.55999 .2.5999 .2.599 .2.599 .
2.175 -0.175 -0.175 -0.175 -0.125 -0.025 -0.025 -0.025 -0.195 -0.195 -0.195	-6.335 -6.335 -4.130 -2.577 2.115 4.200 6.290 8.400
986. 986. 986. 986. 986. 986.	98. 98. 98. 98. 98. 98. 98.

4.0000 4.00000 4.00000 4.00000 4.00000 4.00000 4.00000 4.00000
C800 LGG00 LGG00 LGG000 LGG00 LGG000 LG000 LGG000 LGG000 LGG000 LGG000 LGG000 LGG000 LGG000 LGG000 LGG00 LGG000 LG00
20091. 120051. 120051. 100051. 100051. 100051. 100051. 100051.
CYN -, 10479 -, 06779 -, 06779 -, 02419 -, 02419 -, 07459 -, 07459 -, 07459
.02699 .02699 .02170 .02170 .03140 .03140 .03150 .03150 .03150
CAF .06820 .06820 .06820 .06820 .06820 .06620 .06620 .06630
.12640 .12820 .12820 .12820 .13670 .12850 .12850 .12690
CCM 22030 21630 21040 21040 21040 21040 21040 21040
ON 30800 30800 29300 29300 28300 28900 28900 30800
9ETA -6.370 -6.370 -2.070 2.120 4.230 6.340 6.440
1.103 1.033 1.033

(RBHD09) (11 MAY 75)

AMES 11-707 1A9 CEA + S3 > 79 ORBITER

	900 900		
₹	ORBINC = ELEVON =		At Date
RIC DA			(4)
PARAMETRIC DATA	600. 600.		
	ALPHA = RUDOER = RUDOLR =	8.00	į
	JA 33.	-5.00/	
		RUN NO. 45/ 3 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00	
		GRADIE	
		3.00	
	28,5350 IN. 2000 IN. 10,3320 IN.	RNVL =	
	8.85 9.01	. /S	
2	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	RUN NO.	
REPERENCE BATA	2,4210 50,FT. XMRP 39,849' IN. THRP 39,8490 IN. ZMRP , COURT SCALE		
	SAET " LAEF " SACE "		

ALPHA 4,72000 4,73000 4,73000 4,73000 4,73000 4,72000 7,72000
CABO .05310 .05530 .05530 .05000 .05000 .05070 .05180
C7 .15120 .11970 .04970 03400 07200 15310 15310
CAN093300695002630 .02170 .04570 .06540 .05540
CBL .02770 .02210 .00720 00450 02140 02140
CAF .04010 .07910 .04310 .04320 .04320 .04320 .04320
CA .13320 .1340 .13370 .13260 .13260 .13210 .13230
CLM 23760 22950 21990 21580 2210 22970 22970
00 32100 32100 32620 32620 331100 331100
8ETA -9.290 -6.210 -2.090 2.100 4.180 6.270 9.390
MACH 1,246 1,246 1,246 1,246 1,246 1,246 1,246

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CATE	CATE 20 SEP	t.	TABLLATED	SOURCE PO	TABULATED SOURCE FORCE DATA-1A9A	•					PACE	2
				AMES 11	AMES 11-707 1A9 CEA + S3 + T9 CHBITER	+ 83 + 79 C	X81TER			(110,010)	()! KAY 73	2
		REPERBACE BATA	2						PAR	PARANETRIC CATA		
1			5	72 0000	2			AFA	**	6.000 ORBINC	**	Š
	~ F	2.4210 34.F1.	i ii dileki.	NI COCC.	ž			5	#		ELEVON =	Š.
5 5		39.649D IN.		10.3320 IN.	IX.			3	RLOPLR =	000		
SCALE		. 0300 SCALE										
			FUN NO.	16/ 0	RN/L = 3.96		GRADIENT INTERVAL =	-9.00/	3.00			
	3	47.4	3	ā	5	ż	ŧ	Ē	δ	CABO	ALPM	
	164		30900	21560	06880.	01110	.01450	-,10160	.19060	.04660	6.65000	
	796.		30100	20780	00980	02400*-	.01130	-,07360	10990	.04530	6.67000	
	.997		CG\$62.	-,20140	C96£0.	-, 20340	orrco.	D4670	0000	.04319	6.6700	
	. 597		.29000	-,19610	00000	00120	G680C.	02260	06450	02190		
	. 597		.28900	19540	06090	68000	-, 00000 -	oetco.	01300	24267	6.66070	
	.997		29200	19820	0960.	00600-	00000	01/200	01440	04350	6.67900	
	. 597		20,62	0.202	COSCO.	0.000	E STORY	06090	02611-	003500	6.66000	
	.997	6.190	D. 200.	240421	COCCU.	03210	01410	31119	16485	.04630	6.65000	
	.99	3	00000	91000-	00018	00027	76100	90210	01891	11000*	00000	
			RUN NO.	2 6 / D	RVL = 4.49		GRADIENT INTERVAL =	-5.70/	2.00			
	1		č	X	5	ð	형	Š	Շ	Seg	ALPHA	
	ŞŠ		34100	24560	03460	07610.	.01410	12620	.18,70	.0.510	6,72020	
	Š		33500	23350	06246	02020	.01140	09960*-	.13930	.05220	6.73000	
	6		33000	-,22800	06170.	.02170	.00730	56250	.09010	02050	6,75000	
	106		32900	22410	06170.	06220*	.00250	-,03000	0770	.04660	6.76000	
	106.	2,190	32300	-,22010	05070	.02150	00470	.02910	04160	(1888).*·	6.70.50	
	106.		32200	-,22250	00120	02040	0000	0.090	06730	00000		
	.901		32500	22660	02270.	0.000 E		Color.	17920	05350	6.72000	
		6.415	90106	2000.	00014	61000	00185	.01469	02117	\$0000	0097	
			FUN NO.	36/ 0	RVL = 4.00		GRADIENT INTERVAL =	-5.00/	5.03			
,	Š		3	x	5	ጛ	_ව	Š	Շ	CABO	ALPHA	
•	5		36900	26230	.12570	.06149	.02490	-,19630	.16599	.06430	6,69500	
	901-1	·	35900	25480	12.70	. 116480	.01670	-,08030	.12270	.06190	6.65000	
	1.106		35590	-,25060	.12810	.06680	.01240	, 0.4980	00220	.96139	6.66200	
,	1.196		35800	25270	.12850	.06840	.00560	02470	.03860	.06010	6.67100	
	1.106		36199	25599	.12800	.06860	-,05769	.52140	03450	0.000	6.17.55	
	1.196		.35500	25100	12720	.06650	01460	.04580	65270	04.30	6. 78/1723 A. 78/1723	
	1.193		36000	25620	2590	.06490	01980	(363.7);	01/11	CE SEC	6. 75000	
	1.196		37290	26570	06221	.06120	-,122315-	10001	1,16335	60000	51242	
		GRACIENT	.00014	00015	00011	-,00002	00321	101101	334 40.4	•	!	

AMES 11-707 1A9 OZA + S5 + 79 ORBITER

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(ABMD15)

DATA
PARAMETRIC

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00 ts		6.6900 6.6900 6.6900 6.6700 6.6700 6.6600 6.6900 6.6900
ORBINC		CABO .03370 .03370 .03370 .03580 .03580 .03580
900. 900. 900.		•
ALPHA = RUDDER = RUDPLR =	9.00	CY .14300 .10230 .07200 .04910 06330 10260 10260
₹ 2 2	-9.00/	CYN 06700 04460 02560 02560 .01640 .06130 .06130
	INTERVAL =	CBL .02660 .02130 .01430 .01430 01410 02050 02550
	GRACIENT	CAF .07920 .08100 .08240 .08410 .08270 .08140 .07900
i i i	RNL = 3.01	4.2000. - 13.000 - 13.000 - 13.000 - 13.000 - 13.000 - 13.000
26.5399 IN. .0000 IN. 10.3320 IN.	2 /8 R	26000.
TA XMRP = YMRP = ZMRP =	RUN NO.	ON
#EFERENCE DAIA 2.4215 \$2.F7. 39.6490 IN. 39.6490 IN.	2.00	BETA -9.275 -6.160 -4.120 -2.090 2.100 6.260 6.260 8.360
Edd : 39.	18	MACH 1.246 1.246 1.246 1.246 1.246 1.246

TABLLATED SOURCE FORCE DATA-1A9A CATE 28 SEP 73

. 22 .		000.
(RBH011) (11 MAY 73	CATA .	OKBING = DEVON =
(MBM)	PARAMETRIC CATA	000.
	•	ALPNA # RUDGER # RUDFLR #
AMES 11-707 1A9 GEA + S3 + T9 ORBITER	REFERENCE DATA	2,421D 54,FT. YORF = 26,530D IN. 59,6490 IN. YMRF = .0200 IN. 59,6490 IN. ZMRF = 10,3320 IN.

SAUF :: UREF :: SCALE ::

	6.66000 6.72000 6.72000 6.72000 6.71000 6.66000
	CABO 104840 104850 104850 104850 104430 104610 104650 104650 104650 104650 104650 104650
9.00	CY .14360 .10470 .00820 .00430 .00430 05330 11330 15360 15360
-5.00/	CYN 09760 04590 02590 00660 .02400 .03630 .04780 .04780 .01430 .01148
GRADIENT :NTERVAL = -5.00/	AF CBL 101550 -01620 101550 -01620 101550 -00810 101050 -00010 1010000520 10131000580 10131000860 10157000860 10157000860 10157000860 10157001240 10239001540 10209600208
GRADIENT	CAF 02160 01550 01550 01550 01570 02350 02390 02096
RN.C = 4.90	CA .03100 .03100 .03200 .03340 .03340 .03240 .03340 .03240 .03340 .03240 .03240 .03240 .03240 .03240 .03240
17/ 5 RI	-26720 26290 25980 25900 2550 2510 26170 26170 26170 26170 26170 26170 26170
RUN NO.	ON .384200 .378200 .37800 .37800 .37800 .37800 .37800 00003
	9CTA -6.120 -6.080 -4.050 -2.020 .020 .120 8.210 8.270

ĕ	BETA	3	ş	ð		Ę.	e e	S S	გ	200	A
8	-A 240	39700	27830	.075		.01940	.01900	11980	.17380	noocn*	
i i		COOK	26960	.074		.02150	.01149	08°50	.12970	.05260	8.680
	4.120	38490	26380	.074		.02280	.00740	05700	.06320	.05150	969.69
6	-2.960	36000	-,25820	.07450		.02530	. 00220	02730	03430	04790	6.78000
006	2.110	38200	26330	C/C.		.02440	01010	.05280	07700	.05010	8.77
	6.300	38500	26780	, Erg.		.02360	01330	.08470	12420	02050	6.750
6	6.420	39800	-,27395	.075		uzuzu.	01530	.11340	16960	(1)(cc).	.0.3
	GRACIENT	-,00010	-,00005	000		.00025	0.0017	66310.	CCOTIC-		
		RUN NO.	37/ 0	RAY. "	4.00	GRADIENT	INTERVAL =	-5.00/	9.00		
Ç	BETA	3	ð	ర		CAF	5	S.	رح ح	CABO	ALPHA A Kerry

							8.74500	_	
CABO	.06570	.06250	.06230	.06040	.06120	. n6270	.06270	.0626	.0000
Շ	.15840	.11890	.07850	.04120	~,03540	-,07390	-,11560	15830	01825
S S	10120	07860	-,05250	-,02740	.02330	.04870	.07520	.19919	.91211
ල්	.02519	02040	.01330	02500		01400	-,02010	02530	-,00319
5	CAC CAC	06460	2,490	06730	.08430	.06280	.06180	02650*	£6000°-
t		02221	00221	12770	12550	12549	.12460	.12180	92000*-
3	5	201100	- 28490	02.00	29800	06003	05062	30550	S\$ - G*
į	5	dze.	41450	94600	2000	40600	A1900	43000	-,00067
į	BETA	-6.310	-6.220	001.0	000.2-	2.13		A. 4.73	GRACIENT
	Š	1.103	1.103	1.103	1,103	1.103	1.103		00111

(RB)(011) (11 MAY 75)

TABLEATED SOURCE FORCE DATA-149A DATE 20 SEP 73

AMES 11-707 IA9 ORA + 53 + T9 CRBITER

PARAMETRIC DATA

900.		
GEBING :: ELEVON ::		ALPHA ALPHA 6. 60000 6. 62000 6. 64000 6. 63000 6. 63000 6. 63000 6. 59000 00049
9.00 000. 3.11 000.		CABO ,05490 ,05270 ,05120 ,05020 ,05090 ,05150 ,05200
ALPHA = 6 RUDCER = RUDFLR =	5. 00	CY 13720 19862 19663 19710 10297 10297 103620 103630 103630 103630
24 P. B. B. B. B. B. B. B. B. B. B. B. B. B.	-5.00/	CTN -,06320 -,05970 -,03940 -,03940 -,03560 ,09560 ,09560
	GRADIENT INTERVAL = -5.00/	CBL .02530 .02020 .01330 .01330 01330 01330 02540
	GRADIENT	CAF .07640 .07960 .0140 .06140 .06140 .06170 .06170 .07870
<u>; ; ;</u>	RVL = 3.01	CA .13130 .13220 .13260 .13260 .13210 .13210 .13210
28.5300 IN. .0000 IN. 10.3380 IN.	47/ O RB	32100 31700 31820 31660 31660 31660 31660
A YARP II ZARP II ZARP II	AGN NO.	A3900 A3600 A4400 A3700 A3700 A3200
E.4210 99.FT. 39.6490 IN. 39.6490 IN.	.0399 SCALE	BETA -9.249 -6.160 -4.190 -2.050 2.100 4.190 6.270 8.370
9407 = 2 UROT = 39 BADT = 39	D	HACH 1.289 1.289 1.289 1.289 1.289 1.289 1.289 1.289

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TABULATED SOURCE FORCE DATA-149A
r
SEP

	•		000			
	(11 MAY 73		# #		ALP4A -7.62000 -7.62000 -7.59000 -7.59000 -7.63000	ALPHA -7.69000 -7.52000 -7.52000 -7.52000 -7.54000 00001
	(884012)	PARAMETRIC DATA	-6,000 ORBINC = -5,000 ELEVON = .000		CABO .06670 .06420 .06130 .06130 .06320 00033	CABO .05510 .0550 .0520 .0520 .05150
		PAR		3. 00	CY .22270 .10590 10590 13590 23290	
			A B B	-5.00/	CYN 14260 06790 .01260 .09210 .16740 .01896	
	RBITER			GRADIENT INTERVAL =	CBL . 102050 . 01150 . 01200 . 01500 . 02390	GRADIENI INIEKTAL. 1077 GBL 107490 .01310 10749001310 10747001570 10747001570 10701800345
	0 67 + 52 4				0	
TABULATED SOURCE FORCE DATA-1A9A	AMES 11-707 IA9 CRA + S3 + T9 ORBITER		ž ž ž	KN/L = 3.99	2 2 2 2 4 2	CA
SOURCE FOR	AMES 11-		28.5390 IN. .0000 . 10.3320 IN.	97/ O R	00000+	ALM ALM 13160 13160 15760 13610 13610
TABULATED		ATA	2046 H	RUN NO.	ON 16900 22400 22600 19000	ON NO. 17500 22000 22600 22000 22000
		REFERENCE CATA	2.4219 58.FT. 39.8499 IN. 39.8490 IN. .0399 SCALE		967A -6.400 -4.160 .020 4.260 6.530 GRADIENT	9ETA -0.300 -4.140 .010 4.200 8.439
SATE 28 SEP 73		_	SACF = 29. LACF = 39. BACF = 39.		1,103 1,103 1,103 1,103 1,103	1,250 1,250 1,250 1,250 1,250 1,250

(RBMD13) (11 MAY 75)

TABILLATED SOURCE FORCE DATA-1A9A

ANES 11-707 IA9 ORA + 53 + 79 ORBITER

PARAMETRIC DATA

	900°. # N		4LP44 -6.15020 -5.65020 -5.65020 -5.65020 -7.67020	ALP44 -5.68000 -5.65000 -5.65000 -5.65000 -5.6900000000	
PARAMETRIC VAIA	-6.000 CREVON = .000		CABO .06310 .06370 .06370 .06220 .76120		CABO .05360 .05390 .05280 .05050 .05040
FARA		3.00	CY .21610 .10000 01280 23730 02686	9.00	CY .1952D .09610 01380 12200 02615
	ALPHA RUDGER RUDFLR	-5.00/	CYN 13790 06360 .01180 .08580 .15490	-5.00/	CYN -,12210 -,06090 ,01250 ,06350 ,14860
		GRADIENT INTERVAL =	084. .02210 .01170 00230 01510 02530	GRADIENT INTERVAL =	CBL .02570 .01390 01660 02920
		GRADIENT	CAF .06390 .07020 .07220 .06680 00001		CAF .07470 .07720 .07770 .0757.0
	żżż	RN/L = 3.99	CA .13100 .13300 .13240 .12800 .12800	RIVL = 3.02	CA .12690 .13310 .13900 .12820 .12540
	28.5300 IN. .0000 IN. 10.3320 IN.	118/ O RD	0.09140 .11360 .11360 .112880 .11010 .07760	111/ D R	0.001.00.001.00.001.00.001.00.001.00.001.00.00
2	XXXX III XXXX III XXXX III XXXXX IIX XXXX XXX	RUN NO.	ON 12200 14600 14400 10300	RUN ND.	ON 09700 13200 14600 13400 11600
GEFERENCE DATA	2,4210 90,FT. 39,8490 IN. 39,8490 IN.		BETA -0.410 -4.190 .010 4.240 6.310		-6.300 -4.140 .020 4.200 8.410
u	SACT = 2.4 LACT = 39.6 BACT = 39.6		MON 1,102 1,102 1,102 1,102 1,102		1,245 1,245 1,245 1,245 1,245

TABLLATED SOURCE FORCE BATA-1484

· !		900
(KBMC14) (**)	CATA	ORBINC = ELEVON =
	PARANETRIC CATA	-5.900 -5.900
	ā.	ALPHA " RUDGER = RUGALR =
AMES 11-707 IAS ORA + S3 + T9 ORBITER		20.5350 IN. .0000 IN. 15.3320 IN.
		11 11 fr
	2	XMRP YMRP ZMRP
	REPERDICE DATA	2.4210 59.FT. 39.6490 IN. 39.6490 IN.

SACY :: URDY :: BADY :: SCALE ::

	ALPNA -3.65000 -3.65000 -3.65000 -3.50000 -3.50000 -3.50000		ALPHA -3, 66000 -3, 64000 -3, 540000 -4,00000
	CABO .06260 .06370 .06370 .06310 .05970		CABO .05380 .05380 .05180 .05020 .05020
9.00	CY ,19990 ,06730 -,01520 -,1330 -,22140	3,00	. 16270 . 06780 01050 10690 21070
-5.00/	CYN 11960 05410 .01340 .07620 .14300	-5.00/	CYN 11340 05450 .01010 .07360 .01542
GRADIENT INTERVAL = -5.00/	C8. .02430 .01310 .01510 01630 52760	GRADIENT INTERVAL =	CBL .02660 .01430 0200 01780 03020
GRADIENT	.06860 .06860 .06830 .06830 .06470	GRADIENT	CAF ,07460 ,07790 ,06030 ,07870 ,07470
RN.L = 3.99	CA .12699 .13729 .12929 .12449 .12449	FIV.1 = 2.99	CA .12860 .13800 .13840 .12490 -,00030
96/ D R	000 .00090 .06710 .06710 .04700 .01370	103/ O R	0.04 0.03500 0.03600 0.03900 0.03600 0.03600
RUN NO.	00.110 00.110 00.60 00.60 00.610 00.610	RUN NO.	CN -,01000 -,04700 -,05700 -,04900 -,04600
	0ETA -6.400 -4.180 .010 4.230 8.480 GRADIENT		9ETA -6.310 -4.140 .010 4.160 6.360
i	1.096 1.096 1.096		1.230 1.230 1.230 1.230 1.230

TABULATES SOURCE FORCE DATA-1A9A

DATE 28 SEP 73

AMES 11-707 1A9 ORA + S3 + T9 ORBITER

(RBHD15) (11 MAY 75)

	000				
	la na		ALPNA -1.53000 -1.52000 -1.51000 -1.53000 -1.90000 00119		ALPHA -1.54000 -1.54000 -1.54000 -1.54000
PARAMETRIC DATA	.000 GRBING = .000 ELEVON = .000		CABO .06360 .06300 .06300 .06970 .05900 		CABO .05430 .05410 .05140 .05000 .05000
		3,00	CY .18140 .06260 01190 10540 02238	9.00	.16930 .08150 .08150 10510 19990
	ALPHA RUDGER RUGFLE	-9.00/	CYN 11300 05039 .01080 .07020 .13440	-5.00/	-, 10440 -, 05020 ,01160 ,07070 ,12790
		GRACIENT INTERVAL =	CBL .02610 .01470 02590 01670 02520	INTERVAL =	08t .02700 .01450 01450 01800 03060 03060
		GRACIENT	CAF .06640 .06950 .07060 .06900 .06630 00006	GRADIENT	.07560 .07500 .07500 .08120 .07840 .07560
		EN/L = 3.99	CA .13000 .13259 .13030 .12550 .00036	RNAL = 3.01 GRADIENT INTERVAL =	.13000 .13310 .13260 .12640 .12640
	.N1 0000. .N1 0000 IN.	117/ D FIN	05230 01750 0280 01750 03690 0000	112/ 0 RM	
\$	XXXX III XXX III XXXX IIX XXX IX IX XXX XX	GUN NO.	00 .07000 .02600 .03400 .05000	RUN NO.	ON .00570. .04400. .02500. .03800. .03870.
CONTRACT CATA	2.4210 90.FT. 39.6490 IN. 39.6490 IN.		9ETA -6.400 -4.160 .020 4.230 6.470		-6.310 -4.140 .020 4.180 6.370
	9407 = 28 UAGF = 39 SALE = 39		1.190 1.190 1.190 1.190 1.190		1,245 1,245 1,245 1,245 1,245 1,245

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	(11 WAY 75)		006°		ALPNA .29000 .29000 .26000 .24000 .24000	ALP4A .23000 .24000 .23500 .23500
		ATA	ORBINC ::		•	•
	(800) 6)	PARANETRIC DATA	000.2-		06430 .06430 .06290 .06040 .06500 .06500 .06500	CABO .03410 .03400 .03100 .04990 .05170
		PAR	# # # ***	9.00	CY .17360 .06160 09360 19390 02152	CY .16090 .07630 0960 16600 16600
			ALPHA RUDOER RUDFLR		CYN -10680 -04970 -06570 -12430 -5.00/ 5	.09610 .09810 .00910 .06300 .11920
	1			GRADIENT INTERVAL = -5.00/		CBL ,02690 - ,01460 - ,01620 - ,03050 - ,03094
	3 + 79 0681			GRADIENT II	CAF CBL .06390 .02800 .06830 .01690 .06830003040 .06390003040 .0001000033 6.ADIENT INTERVAL =	CAF .07570 .07860 .07890 .07810 .07510
SATA-1A9A	AMES 11-757 1A9 ORA + SS + T9 ORBITOR			3.99	CA	CA . 12980 . 13280 . 13190 . 12820 . 12680 . 1
TABULATED SOURCE FORCE BATA-1A9A	APES 11-75		28.5300 IN. .0000 IN. 10.3320 IN.	99/ 0 RWL =	CLM -, 10580 -, 07900 -, 06820 -, 07380 -, 09580 -, 09580	11060 06770 07120 08130
TABULATED		<	SARP = 9842	RUN NO.	ON .14400 .11100 .10200 .10300 .1320000071 .	00 114600 111900 117200 113000 113000
		PEPERENCE BATA	2.4210 59.FT. 39.8490 IN. 39.8490 IN. .0300 SCALE		967A -6.419 -4.190 .919 4.229 8.450 68ADIENT	9ETA -6.300 -4.140 .010 6.360
CATE 28 SEP 73		.			1,099 1,099 1,099 1,099	1.247 1.247 1.247 1.247 1.247
CATE 24			SAEP SAEP SCALE			

REFERENCE DATA

(KENDLP) (11 MAY	
(KBM) 7)	
9 ORBITER	
ANES 11-707 IA9 ORA + 53 + 79 ORBITER	
11-707 IA9 (
MES :	

88. 88.				
H H	;	2.71000 2.72000 2.72000 2.71000 00000		A.P.44 2.73000 2.73000 2.73000 2.63000000000
,000 0.001MC ,000 0.00N ,000		CABO ,06370 ,76160 ,06020 ,06119 ,06049		CABO .05510 .05240 .05290 .09040 .05290
	3.00	CY .19940 .06690 00760 17640 17640	5.00	CY .14760 .06690 09200 17440
ALPHA RUDGE RUDGE	-5.00/	CYN -,09750 -,04080 .05780 .05550 .11250	-5.00/	CYN0693004170 .05890 .05610 .11070
	GRADIENT INTERVAL =	CGL .02660 .01600 01900 01900	GRADIENT INTERVAL =	CBL .02630 01300 01670 01670
	GRADIENT	.06260 .06280 .06890 .06890 .06290	GRADIENT	CAF .07520 .07640 .07990 .07890 .07560
žžž	RVL = 3.99	CA .1258G .1259G .1259G .1275D .1275D .1270G00024	RNV. = 3.01	.13090 .13090 .13230 .12870 .12890
.0000 IN. .0000 IN. 10.3320 IN.	116/ D R	QM 17560 14660 14660 16690 16690	113/ D R	18149 15639 14139 15389 17129
2046 = 2746 = 2746 = 2	SC NO.	00052. 00112. 00702. 00902. 00802.	AUN NO.	CA 52900 . 21300 . 19600 . 21000 . 21000 . 23200
2.4210 39.FT. 35.6490 IN. 39.6490 IN. .0300 SCALE		-6.390 -4.170 -010 -4.200 6.449		BETA -0.290 -4.130 .010 4.160 6.350 68.350
94EF = 2. 14EF = 35. 94EF = 39.		MOM 1.132 1.113 201.1 201.1		MACH 1.244 1.244 1.244 1.244

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PASE

	(ABIO16) (11 NAY 75)	PARANETRIC BATA	ALPAN = 4,000 ORBINC = ,500 RUGER = -5,000 PLEVOR = ,000 RUGELR = ,000	-5,30/ 5,30	CYN CABO ALPHA 99420 .15400 .06290 4.64000 03920 .06680 .06180 4.64000 .05400 .06180 4.64000 .05400 .06180 4.65000 .10890 17290 .06079 4.65000 .91113 01789 2011 20120 .5.00 A.7200
tabulated source force data-lasa	ANES 11-707 1A9 CRA + SS + T9 CRBITER		= 28.5300 IN. = .0500 IN. = 10.3320 IN.	100/ D RWL = 3.98 GRADIENT INTERVAL =	-21900 .12330 .06040 .0263021900 .12330 .06554 .0263022122 .12750 .06554 .0137022122 .12750 .0655022120 .11240 .0568021430 .11240 .05880000360003
CATE 28 SEP 73 TABLLAT		REFERENCE DATA	SEEP = 2.4210 59.FT. DORF LGEP = 39.8450 IN. MEP SCALE = 139.8450 IN. ZPRP SCALE = 13505 SCALE	ALM NO.	HMOH BETA ON 1.101 -0.380 .30500 1.101 -4.170 .29000 1.101 4.210 .29800 1.101 8.440 .29900 64ADIENT00986 64ADIENT00986 64ADIENT00986 1.245 -0.280 .31700 1.245 -4.130 .29900 1.245 -4.130 .29900 1.245 -4.130 .29000 1.245 -4.130 .29000

	PARACTRIC CATA
AMES 11-707 1A9 CRA + S3 + T9 CRBITER	1 4
	REFERENCE SATA

86			
H II		4,544 6,99200 6,99200 6,89200 6,89200 6,88200	A.PM 6.75500 6.60000 6.60000 6.75000
5.000 003170 -5.000 01.Evolu		CABO 05180 05130 06130 06130 06130	CABO .03599 .03540 .03280 .03599 0317
RIDDER = -5.	5.00	CY .15139 .06633 00699 16999 16999	5.00 C7 .12650 .03760 02600 15201 15201
24.00.00	-5.00/	CON 09510 09510 .09690 .05390 .11900	CYN CYN C07390 03240 03670 CS-0750 CS-07
	GRADIENT INTERVAL =	CB. 	GRADIENT INTERVAL = JAF COL. G7410 .02459 G7730 .02459 G7500 .031560 G7500 .05599 G7500 .02669
	GRADIENT	.05860 .05460 .06460 .06160 .05890 .05890	GACTENT CAF .07410 .07410 .07420 .076900 .076900 .076900 .076900
in. 'N	RN/L = 3.99	CA .1224D .1246D .1246D .1229D .1182D .00042	CA (12962) (13970) (13127) (12892) (12693) (12693)
.N1 0000. .N1 0000. .N1 0388.01	115/ 0 RN	20192. 25030. 23629. 24429. 25570.	0.4 (a) May 10 M
11 d2042 11 d2044	RUN NO.	00 235500 235600 34600 35900 35900 35900 35900	ON NO. ON 37200 37200 35200 35200 35200 35200
2.4215 54.FT. 39.6495 IN. 39.6495 IN. .0395 SCALE		-6.345 -4.150 .010 4.220 6.445	DETA -0-29- -0-21.4- -0-31.4- -0-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3
SEC = 2.4		1.101 1.101 1.101 1.101 1.101	1,246 1,246 1,246 1,246 1,246

TABULATED SOURCE FORCE CATA-1A9A
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2
CATE

(21 MAY 75)

PARMETRIC DATA

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	8 8				
	GEVON ::		6.76900 6.71900 6.71900 6.71900 6.77900 6.77900		6.69000 6.69000 6.60000 6.60000 6.62000
PARMETRIC CATA	•		.06340 .06340 .06270 .06040 .06030		CA80 .055800 .052807 .052807 .052807 .053500
PARMET	0.00. 0.00. 0.00.		CY .14590 .06730 .0700 .0700 .16590 01762		CY .12190 .05390 .05460 .06620 .12120 .131449
	ALPHA = RUDDER = RUDTLR =	3.33		3.90	, . , .
	4 & &	-5.00/	CYN 09150 04290 .00660 .05390 .10701	-5.00/	CYN0710002960 .09570 .94190 .07570
		GRADIENT INTERVAL #	CBL .02620 .01290 0190 01610 02710	GRACIENT INTERVAL =	08490 .02490 .02200. .02490 .02490
		GRACIENT	CAF .05570 .06190 .06470 .05520 .05520		.07240 .07240 .17670 .07660 .07600 -,00017
		FIVT = 3.96	CA .12110 .12470 .12510 .11700 .11700	RVL = 2.99	CA .12800 .12970 .12920 .12770 -, 12770
	28,5900 IN. 2000 IN. 19,3320 IN.	VAR 0 /101	NUD 91262 02535 021362 03000 031000.	1067 B RBV	CLM 32150 31500 31500 30610
1 2	H day	ACK NO.	O 242900 41700 62717 62500 - 50000	RUN NO.	O 0065. 00965. 00965. 00065.
FEPESENCE SATA	2.4210 53.FT. 39.6490 IN. 39.8490 IN. .0300 SCALE		-6.319 -4.140 .020 4.229 8.460		6230 -6.230 -4.119 .010 4.160 7.320
	86 Er 61 ES		1.099 1.099 1.099 1.099 1.099		1.246 1.246 1.246 1.246
	SAUF SAUF SCALE				

CATE 20 SEP 73

3 3 3 3

SKOT = CROT = BAOT = SCALE =

(RESIDER) (11 NAY 75)

AMES 11-707 1A9 OEA + 53 + T9 ORBITER

006.				
11C DATA 5 ONBINE # 5 ELEVON =		CABO ALPHA .06450 -7.66000 .06400 -7.65000 .06210 -7.55000 .06140 -7.56000 .06280 -7.56000		CABO ALPHA .05490 -7.67000 .05410 -7.64000 .05280 -7.62000 .05280 -7.58000 .05250 -7.60000
PARMETRIC DATA ALPHA = -6,000 ORBI RUDER = -10,000 ELEW RUDER = ,000	8.00	.21840 .09930 02370 14210 26610	9,00	.20715 .10200 01470 13020 24090
A RUE	/00*5- =	13680 05980 .02320 .10170 .18010	-5.00/	CrN 12790 06190 .01650 .03330 .16110
	CRADIENT INTERVAL = -5.00/	.01670 .00940 .00940 .00460 .01650 .02590	GRADIENT INTERVAL = -5.00/	.0130 .01130 .01130 0130 02850
		CAF .06870 .07150 .07260 .07010		CAF .07650 .07940 .08380 .08140 .07980
i i i	RVL = 3.90	CA .13330 .13540 .13670 .13500 .13300	RVL = 3.02	CA .13140 .13340 .13660 .13210 .13230
28.5300 IN. .0000. 10.3320 IN.	80/09 80	.13920 .17320 .17320 .17000 .13810	69/ D R	ALM 12990 116160 17810 13890 13830 00333
ATA XMRP = YMRP = ZMRP =	RUN NO.	NO 16300. 2430. 24300. 16350.	RUN NO.	0.0271 0.022 0.0705 0.0705 0.0707
E.4215 99.FT. 59.6495 IN.	. 0350 SCALE	6.240 -0.410 -0.200 -0.000 4.240 6.520 6.60100		-4.130 -4.130 -0.310 -4.130 4.130 6.420 GRADIENT
N 11 11		1.100 1.100 1.100 1.100 1.100		1.245 1.245 1.245 1.245 1.245

PAGE

1 11 WAY 1			CLEVON =		ALPHA -5.57000 -5.55000 -5.54000 -5.56000 -5.57000		4.P44 -5.72000 -5.99000 -5.89000 -5.60000 -5.90000
(RBMILEE)	PARANETRIC DATA		-6.000 CLEVON -10.000 ELEVON		CABO .06410 .06470 .06120 .06180		CABO .05340 .05370 .05260 .05190 .05190
	PARA		n n n	9.30	CY .20290 .09030 -,13350 -,24760 -,12655	9.00	CY .19420 .09330 01690 12130 22760
			ALPHA RUDGER RUSFLA	-8,90/	CYN1256005320 .05460 .16590	-5.00/	CYN 11860 05580 .01770 .190659 .15080
## TET				GRADIENT INTERVAL =	.02100 .01000 .0.00420 .01710 .01710	GRADIENT INTERVAL =	CBL .02490 .01220 01870 01870 03080
5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					CAF .06600 .07150 .07260 .07260		CAF .07770 .08040 .08300 .07980
(RCE FORCE DATA-1ASA)			z z z	RN/L = 3.99	CA .13210 .13220 .13420 .13420 .13160	RIVL = 3,01	CA .13110 .13410 .13700 .13400 .13080
TABLEATED SCINCE FORCE DATA-TABLE			28.5300 IN. .0000 IN. 10.3320 IN.	61 / D RN	OC170. 02130. 02131. 02701. 02700.	707 0 RB	G.M .07190 .09800 .11320 .09810 .07820
TABULATES		4	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	RUN NO.	CN 09600 14700 14000 09600	RUN NO.	ON 09600 12400 14200 12700 10200
		REPERDICE CATA	2.4210 59.FT. 39.8490 IN. 39.8490 IN.		6ETA -6.420 -4.200 .010 4.230 6.490		ECTA -8.320 -4.190 .010 4.160 8.390 GRADIENT
ATE 28 SE0 73		si.	AEF = 2.4 AEF = 39.6 AEF = 39.6		1,099 1,099 1,099 1,099 1,099		1.249 1.249 1.249 1.249 1.249

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CATE 20 SEP 73

AMES 11-707 1A9 CRA + S3 + T9 CKBITER

(RBMR23) (11 MAY 79)

PARANETRIC DATA

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			ALP44 -3.60000 -3.59000 -3.59000 -3.59000 -3.69000 -3.69000		ALPHA -3, 69000 -3, 62000 -3, 62000 -3, 62000 -3, 63000 -, 00000
-4,000 OKBINC = -10,000 ELEVON =			CABO .06290 -1 .06420 -1 .06000 -1 .06081 -1		.05410
TAXAT	A = -4,000 ER = -10,000 LR = .000	5.00	CY .18610 .08420 10257 11950 23020	3.00	.17960 .06780 01720 11470 21400
	ALPNA RUDGER RUGGER	-9.90/	CYN 11540 04830 .02170 .08370 .01569	-5.00/	CYN1061005210 .01789 .08110 .14130
		GRADIENT INTERVAL =	CBL .02290 .01139 00420 01770 02910	GRACIENT INTERVAL =	CBL .02520 .01280 00350 01900 03140
			CAF .06930 .07260 .07260 .07120		CAF .07680 .08470 .08310 .08310
	żżż	RN/L = 3.96	CA .13180 .13490 .13850 .13210 .129651 00033	RAVL = 3.01	.13290 .13560 .13760 .13390 .13060
	.NI 0000. .NI 0000. .NI 0588.01	62 / D	0.04 .01120 .05010 .06900 .04830 .011000	71/ D R	0.00670 .00570 .00540 .03440 .01660
DATA	13 d 33 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d	GN NU	0010°- 00190°- 00190°- 00190°- 00810°-	RUN NO.	ON -, 00900 -, 04100 -, 04200 -, 04200 -, 00012
REPERENCE DA	2.4216 59.FT. 39.6490 IN. 39.6490 IN. .0300 SCAE		-8.420 -4.200 -0.000 4.220 6.470		9ETA -6.330 -4.190 .mp. 6.17. GRADIENT
14	SCALE : 39.0		1,099 1,099 1,099 1,099 1,099		1.246 1.246 1.248 1.248

(RBIO24) (11 NAT 75)

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TABLLATED SOURCE FORCE SATA-149A	
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CATE 28 SEF 73	
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	8 8 8 8		ALPHA -1.50000 -1.49000 -1.46000 -1.51000 -1.51000		ALPHA -1.57000 -1.56000 -1.46000 -1.47000
FARANETRIC BATA	NO GEBTING NO ELEVON		CABO .16420 .06420 .06940 .06970 .06070		CABO .05340 .05420 .05060 .05200 00043
FARANET	44 = -2,000 XX = -10,000 LX = .000	5.00	CY .17420 .97450 01930 11040 21490	2.00	CY .16620 .07860 10600 19950
	ALPHA SUDDER RUDFLR	-8.00/	CYN 10510 04140 .01890 .07640 .14140	-5.00/	CYN 09930 04520 .07480 .13060
		GRADIENT INTERVAL =	CBL .02460 .01320 00420 01980	GRADIENT INTERVAL =	CBL .02570 .01280 01560 03200
		GRADIENT	CAF .06790 .07120 .07170 .06810	GRADIENT	CAF .07970 .08230 .08420 .08100
		RNA = 3.99	CA	RNL = 3.51	CA .13310 .13640 .13470 .13900 -,00020
	28.5990 IN. .0900 IN. 15.3320 IN.	W 0 / 00	-, 105690 -, 105690 -, 105090 -, 105080 -, 105080 -, 105087	72/ O RN	05680 0340 0390 0500
REPERENCE DATA	29862 2 43862 2 43862	RUN NO.	00 .00000, 00000, 00000, 00000, 00000,	RUN NO.	00 00,000 00,000 00,000 00,000 00,000
	2.4210 59.FT. 39.6495 IN. 39.8495 IN.		-6.420 -4.200 .010 4.215 8.450		9ETA -8.320 -4.160 4.160 8.350 GRADIENT
u.	SACF = 2.4 LKEF = 39.6 BMEF = 39.6 SCALE =		MO+ 1.101 1.101 1.101 1.101		1.248 1.248 1.248 . 1.248
	и <u>з</u> ву	•	•		

(RBMDES) (11 MAY 79)

		66. 6.			
AMES 11-707 1A9 ORA + S3 + T9 ORBITER		81 61	ELEVOR =		ALPHA .625000 .61000 .26000 .24001 .61000 .20000 .20000 .20000 .20000
	IIC DATA	-			CABO .06310 .06310 .06310 .06330 .06130 .06110 .00110 .00100 .00200
	PARANETRIC DATA	000			740 770 770 740 740 690 000
		ALPHA = RUDGER = RUDGLR =		8 .00	, , , , , , , , , , , , , , , , , , ,
				-5.00/	CYN -,09610 -,03770 -,01770 -,01770 -,01770 -,01770 -,01360 -,01360 -,01360 -,02900
				GRADIENT INTERVAL =	AF CBL CYN .06610 .0263009610 .07120 .0143009910 .0702000430 .01770 .0702000430 .01770 .0669002690 .013260 .0001400419 .01347 .0669001990 .06690 .00000 .00000
			ž ž ž		CAF .06710 .07120 .07000 .07000 .06690 .000014 GRADIENT CAF .08440 .00000
		ž		RVL = 3.99	CA .13925 .13370 .13180 .13190 .12810 00029 RWL = 3.01 CA .13910 .13910
		28,5375 IN.	.NI 0000.	64/ 50 R	CLM115200676006480114301143011430114301143011670
	į	# ### ################################		RUN NO.	CN .15600 .09600 .19600 .15600 00179 RUN NO. ON .11900 .14000
		REFLIENCE UNIA	2.4210 59.FT. 39.8490 IN. 39.8490 IN.		9ETA -6.410 -4.200 .010 4.210 6.460 GAADIENT 4.160 6.340
		•			MO. 1.096 1.096 1.096 1.096 1.096 1.246
			SALE		

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PACE	(11 MAY 75		** "	ALPHA 2.60000 2.60000 2.60000 2.70000 .00476 ALPHA 2.50000 2.50000 2.57000 2.71000
	(RBMDZ6) (PARAMETRIC DATA	.000 0681MC =	CABO .06590 .06990 .05120 .05120 .05450 .05450 .05460 .05460
	ä	PARANE	ALPNA = 2,000 RUDPSR = -10,000 RUDPLR = ,000	5,00 CY 04630 04630 16910 01966 01150 01150 01150 17900 17900
			78 P	CYN0917005140 .01290 .12300 .01244 -5.107 -5.07/0686003910 .01320 .01228
	NTER .		! 20	CR CR CR (05310 (07200
	S + 79 OK		r avegger	CAF .06310 .07230 .06930 .06720 .06720 .08720 .08340 .08340 .08320 .08340 .08320
TABLEATED SCHECE FORCE DATA-1A9A	AMES 11-707 IA9 ORA + SS + T9 ORBITER		žžž	2010 2020 2020 2020 2040 2040 2040 3,01 3,01 3,01
SCURCE FOR	AMES 11-		888	CON 17340 18630 18470 17230
TABULATED		*	XXXX TO THE THE THE THE THE THE THE THE THE THE	CN .24000 .21400 .21400 .21400 .224000 .224000 .224000 .225000
		REPERENCE BATA	2.4210 59.FT. 39.8490 IN. 39.8490 IN. .0300 SCALE	64.420 -6.420 -6.200 -6.440 -6.440 -6.320 -6.130 -6.130 -6.130 -6.130 -6.130 -6.130
SATE 28 SEF 73		íz	SREF = 2.4 LRGF = 39.6 BREF = 39.0	MOH 1,099 1,099 1,099 1,099 1,099 1,247 1,247 1,247

TABULATED SOURCE FORCE DATA 10.34

(RBMD27) (11 MAY 75)

^		906	900°				
(11 ×4 7		#	" 7		ALPNA 4.61000 4.62000 4.63000 4.72000 4.76000		ALP44 4.61000 4.63000 4.64000 4.64000
(RBMDE7) (IC DATA	CRRINE			CABO . ne2'60 . ne2'90 . n59'60 . n61'80 . n61'80		CABO .05470 .053820 .05200 .05200 .05470
MOK)	PARAMETRIC DATA		1 18 81 81	3.00	.15130 .15130 .06380 .01330 .17560 -17560	3,00	CY ,14030 ,06260 -,01200 -,16390 -,16390
		:	RUDER	-9.00/ 5.	CYN D8960 D3460 . D6070 . 11420 . D1136	-5.00/	CYN -,0e060 -,03340 ,01390 ,05980 ,10660
ITEX				NTERVAL =	CBL .02490 .01170 .01860 .01860 .018070	GRADIENT INTERVAL =	CB. .02510 .01170 .01360 .01790 02960
3 + 79 ORB)				GRADIENT INTERVAL =	CAF .06320 .06780 .07710 - .06800 - .06290 -	GRADIENT 1	CAF -07920 -08210 -08330 -08330 -08300 -08300
AMES 11-707 1A9 CRA + S3 + T9 CRBITE?			żżż	FINT = 3.99	.12990 .13010 .12980 .12880 .12470	RN/L = 3.01	.13390 .13390 .13520 .13530 .13470
AMES 11-7			28,5300 IN. .0000 IN. 10,3020 IN.	667 D GN	CLM 21480 20330 20730 21800 00046	75/ D R	CAH 23430 21720 27290 22230
		<u> </u>	XMRP III III III III III III III III III I	GUN NO.	ON . 30000 . 28600 . 29300 . 35400 . 35400	RUN NO.	CON .31700 .29703 .28200 .39000
		ADFERENCE DATA	2,4210 53.FT. 39,8490 IN. 39,8490 IN.		BETA -0.390 -4.190 .000 4.200 8.430 GAADIENT		-6,300 -4,140 .000 4,160 6,340
			ST ST ST ST ST ST ST ST ST ST ST ST ST S		# # # # # # # # # # # # # # # # # # #		1.246 1.246 1.246 1.246 1.246

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PAGE	(21 PAY 73)		ts 65		6.72000 6.73000 6.61000 6.99000 6.77000 01671	4.62000 6.62000 6.59000 6.71000 6.71000
	(KBIKOZO) (PARANETRIC DATA	6.000 ORBING = 10.000 ELEYON = .000		CABO . 06390 . 05390 . 05340 . 06320 . 06320	CABO .05500 .05240 .05240 .05260 .05490
	•	PARAN	H 11 H	8. 00	CY .14960 .06660 -,09520 -,17560 -,17560 -,51829	.13170 .05690 01080 07550 13670
			ALPHA RUDDER R.DFLR	-9.00/	CYN 09030 03030 .01060 .01060 .11710 .01188	CYN 07450 03070 .03310 .03190 .00996
	ZB1TER			GRADIENT INTERVAL =	AF CBL .06030 .02220 .06030 .02220 .06620 -,00300 .06440 -,01660 .05990 -,02830 .00034 -,0327 .0400 INTERVAL =	CBL .02410 .01160 00340 01730 02870
	D 6T + 28 ¢				0	CAF .07860 .08250 .08400 .07840 00006
E DATA-1A9A	AMES 11-707 1A9 CRA + S5 + T9 ORBITER		żżż	SWL = 4.00	CA .12440 .12750 .12750 .12520 -,00039	CA .13360 .13570 .13660 .13460 .13340 00013
TABULATED SOURCE FORCE DATA-1A9A	AMES 11-T		26,5300 IN. .0000 IN. 10,3320 IN.	N3 C /19		Д.И 27890 26850 26890 277210
TABULATED		*	H 4842	RUN NO.	ON .36600 .35600 .35700 .36100 00108	00876. 02876. 02886. 02176. 02176.
		OFFERNATE DATA	2.4215 59.FT. 59.8495 IN. 59.8490 IN.		9ETA -6.370 -4.170 .000 4.200 6.430	BETA -9.260 -4.130 0.000 4.160 8.390 SRADIENT
CATE 28 SEP 75		0	SADT = 2.4 URET = 39.0 BARET = 39.0		1.098 1.098 1.098 1.098 1.098	1.248 1.248 1.248 1.248 1.248

SOURCE PORCE DATA THAT
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Catt 28 SEP 73

(85 TAN 11) (850HB)

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# # u 2	ALPW 6,74000 6,64000 6,64000 6,64000	6,64000 6,64000 6,65000 8,64000 6,73000
IC CATA ORBINC = CEEVON =	CABO 	CABO .05460 .05290 .05390 .05380 .05380
PARAMETRIC DATA ALPHA = 6.000 GEBII RUDGER = -10.000 ELEW RUGFLR = .000	5.00 CY .14470 .06640 0940 17270 01847	
ALPHA RUDGE RUGFL		CYN -, 06860 -, 02600 , 01280 , 04860 , 09220
<u> </u>	GRADIENT INTERVAL = -5.00/ AF CBL CYN 105970 .0229008780 106370 .110003960 10644001730 .06350 10586002860 .11590 10701100339 .01235	CBL .02370 .01080 0350 01690 02850
5 2 • •	CAF CAF .05970 .06700 .06700 .06440 .05860 -,00011	CAF .07730 .08190 .08180 .08160 .77690
AMES 11-707 1A9 ORA + 53 + 19 UPGITER PR.5950 IN. 10.3320 IN.	CA 12450 12770 12770 12780 12780 12240	
NES 11-757 PR.5390 IN. .0000 IN. 15.3320 IN.	66/ 0 fg	ន្ទមន្ទន
1 4.39.2 1 4	CN NO. CN 42900 .43700 .43700 .23000	ON
REFERENCE BATA 2.4215 50.FT. 33.8495 IN. 39.8495 IN.	eeta -6.393 -4.195 .000 4.200 6.493 GRADIENT	BETA -6.250 -4.120 .000 4.170 68.360
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MACH 1.098 1.098 1.098 1.098 1.098	1.246 1.246 1.246 1.246 1.246

SAGE :: BAGE :: SCALE ::

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3	(21 MAY 73)		GBINC = ELEVON =		ALP -7,69000 -7,62000 -7,64000 -7,66000 -7,66000	ALPHA -7.46000 -7.60000 -7.61000 -7.63000 -7.65000 -7.65000
	(KB)(D30)	PARAMETRIC BATA	-6.000 OXBINC -15.000 ELEVON .000		CABC .06760 .06520 .06260 .06470 .06470	CABO .03660 .05540 .05410 .05330
		PAR	ALPAA = -1: RUDER = -1:	8.00	68920°- 001602°- 00161°- 00890°- 00892°-	
			≯	/00*5- =	CYN -,12810 -,51990 -,11000 -,11000 -,11000 -,11000 -,11000 -,11000	
	RBITER			GRADIENT INTERVAL =	CBL. .01780. .00310. .00510. .01780. .02750.	CAF CBL .07580 .02180 .07580 .00990 .0839020480 .0814001970 .00012503030
	• 53 • T9 C				- 1	
TABULATED SOURCE FORCE DATA-1A9A	AMES 11-707 1A9 ORA + S3 + T9 ORBITER		żżż	FINT = 4.03	9 9 9 9 9 9 9	RVL = 3.00 CA .13230 .13470 .13300 .13340
SOURCE FORCE	AMES 11-7		26,5305 IN. .0000 IN. 10,3350 IN.	78/ U EN	666666	0.00 GOM
TABLATED		¥.	2066 H	RUN NO.	CN 16900 29000 24600 18900 .00036	CON NO. C. 1750- C. 21750- C. 21750- C. 21750- C. 18650- C.
		GEPERBACE DATA	2.4219 59.FT. 39.8495 IN. 39.8499 IN.		-6.420 -4.210 .000 4.240 6.520 GAADIENT	9574 -6.320 -4.150 010 6.195 6.410
CATE 28 SEP 79		(P	Set = 2.4 Set = 39.6 Set = 39.6		MO	1.244 1.244 1.244 1.244 1.244

CATE 28 SEF 73

*ABULATED SOURCE FORCE BATA-1A9A

AMES 11-707 IA9 ORA + 55 + 79 GELTER

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(RBM031)	

PARANETRIC CATA

	8 P				
	85. H R		ALPAA -5, \$8000 -5, \$7000 -5, \$7000 -5, \$8000 -1,0000		APPA -5.69000 -5.54000 -5.26000 -5.26000
	.000 0031MC = .000 0000M = .000		CABO .06530 .06580 .06280 .06290 00008		CABO .03469 .03619 .03579 .05299 00035
- ANNEL	# # H H H	5.30	CY ,19170 ,06010 -,0310 -,14240 -,25900	5.00	CY .16150 .07960 02200 13510 23950
	ALPHA RUDDER RUDDER	-5.50/	CYN 11560 04390 .03100 .10360 .17660	-5.99/	CYN1078904499 .02899 .09849 .16189
		GRADIENT INTERVAL =	CBL	GRADIENT INTERVAL =	CBL .02310 .01080 00520 02240 03240
		GRADIENT	CAF .06630 .07590 .07500 .07570 .07530	GRACIENT	CAF .07730 .07970 .08470 .08260
	<i>.</i>	RN/L = 3.99	CA .13360 .13810 .13760 .13810 .13520 .00000	RVL = 2.99	CA .13210 .13580 .13620 .13410 .13240
	28.5350 IN. .0006 IN. 15.3326 IN.	79/ U RN	M.D. 20472. 23-11. 28-21. 24-111. 27-27. 27-27.	£9 0 /6€	0.07610 1.0300 1.1450 1.0350 1.0350 1.0300
4 2	E 4362	ALN NO.	ON -,99900 -,15000 -,14400 -,09900	RUN NO.	ON 10100 13200 13300 11000
REFERENCE BATA	2.4219 59.FT. 39.8499 IN. 39.8499 IN.		BETA -6.435 -4.210 .000 4.225 8.490 GRADIENT		9ETA -0.329 -4.150 .000 -4.160 6.380
ūž	SAEF = 2.4 LREF = 39.6 PAE = 39.8		1.097 1.097 1.097 1.097 1.097		MO. 1,290 1,290 1,290 1,290 1,290

9	e e		8 8			
PASE	(11 May 73	_	¥ 5		2,5920 -3,5920 -3,5920 -3,5920 -3,5920 -3,5920	A.P.M3.64000 -3.65000 -3.65000 -3.65000 -3.65000
	(KBNOSE)	PARAVETRIC BATA	-4,200 GGBTK -15,000 ELEVON ,000		CABC .06540 .06590 .06590 .06590 .06210 .06220	CABO ,03490 ,03530 ,03500 ,03120 ,03160
		PAR	ALPHA = -1 RLDDER = -1 RLDFLR =	2.93	CY .17800 .07260 02300 13270 24219 02441	CY .16630 .07397 2553. 2556. 2556.
			₹ 22 22	/00*5- =	CYN1062003900 .02803 .03803 .16390 .01597	CYN -,09710 -,14020 ,72780 ,92740 ,15210
	OKBITÉR			GRADIENT INTERVAL = -5.00/	04 CBL 07010 .02160 07020 .01030 0702001940 0702003110 0702003110 0702003110	CR. .02372 .01190 .0200. .03020 .03020 .03020
_	51 + 23 +				•	.07860 .08200 .08430 .08220 .07950
TABLEATED SOURCE FORCE DATA-1A9A	AMES 11-707 1A9 C/EA + SS + T9 CKBITÜR		IN	FIV. = 3.99	CA .13350 .1350 .1350 .1340 00020	CA .13350 .13600 .13360 .1310 .13110
SOURCE FO	AMES 11		28,5396 IN. .0000 IN. 19,3320 IN.	6 /00	0.000 0.0000 0.0000 0.0000 0.0000 0.0000	0.000.000.000.000.000.000.000.000.000.
TABULATE		ATA	2067 :: 2067 :	RUN NO.	ON NUS	ON -,01500 -,04500 -,05000 -,02600 -,02600
_		REPERBNCE SATA	2,4215 59.FT. 39.8495 IN. 39.6495 IN. .0300 SCALE		0CTA -0.430 -4.210 .:005 4.210 6.460 GRADIENT	-6.330 -4.160 .000. 4.170 8.360
CATE 28 SEP 73			SECT = 2. URIT = 39. BRIT = 39.		1.190 1.190 1.190 1.190 1.190 1.190	1,249 1,249 1,249 1,249 1,249

TABLEATED SOURCE FORCE DATA-1194

ANES 11-707 1A9 ORA + S3 + T9 ORBITER

PARTETRIC CATA

(48) (11 MAY 79)

8 8					
# #			1.5720 -1.5720 -1.4900 -1.4800 -1.4900 -1.2900		ALPHA -1.61900 -1.58000 -1.58000 -1.48000 -1.48000
-2.000 OKBINC :5.000 ELEVON			CABC .06410 .06470 .06100 .06100 .06130		CABO .05430 .05320 .05320 .05140 .05250 00035
* \$	tt	3.30	CY .16470 .06590 12190 22340 02233	5.00	.15430 .16549 .16549 11900 21230
ALPHA RUCCS	RUSTA	-5.00/	CYN 19690 13430 . 126310 . 15450	-5.00/	CYN 0887D 0339D .0265D .06530 .14160
		GRADIENT INTERVAL =	CBC CBC2CC CBC2CC CCCCCC CCCCCCCCCCCCCC	GRASIENT INTERVAL =	CBL .02410 .01160 .01160 .02130 .02130
		GRADIENT 1	506680 507050 507170 507270 507060	GRADIENT 1	CAF .07890 .08230 .08530 .08360 .08070
ر و	•	RNL = 3.98	CA .13290 .13520 .13290 .13200 00017	RVAL = 2.99	CA .13330 .13830 .13860 .13860 .13320 .13320
26,5500 IN.	19.3320 IN.	81/ 5 RW	05030 05030 00030 01710 04710	91 0 RBV	
# 1 0.4 2.5	1 d342	RUN NO.	NO 1.6900. 1.6900. 1.0900. 1.0900.	RUN ND.	00000. 00000. 00000. 00000. 00000.
REFERENCE DATA 2,4210 54.FT.	39.8495 IN. 39.8495 IN. .0355 SCALE		-8.420 -4.200 .000 4.210 6.450 GRADIENT		BETA -0.320 -4.150 0.000 0.350 6.350
ri N	LAEF = 39.0 BAEF = 39.0 SCALE =		1,099 1,099 1,099 1,099 1,099		1,249 1,249 1,248 1,248 1,248

	EPTERENCE DATA 4215 59.FT. 5495 1N. 6499 1N. 6499 1N. 6300 SCALE 6.419 6.429 6.429 6.429 6.429 6.429 6.429 6.429 6.429	TABULATED SOURCE FORCE DAIN-LINA TA NORF = 28,5900 IN. YHEF = 10,3320 IN. ZHEF = 10,3320 IN. ZHEF = 10,3320 IN. ZHEF = 10,3320 IN. ZHEF = 28,5900 IN. ZHEF = 5,9000 IN. ZHEF = 10,3320 IN. ZHEF = 10	AMES 11-797 AMES 11-797 28.3920 1N. 20.3320 1N. CLM CLM CLM CLM CLM CLM CLM CLM CLM CLM	26.5320 IN. 26.5320 IN. 20.5320 IN. 10.3322 IN. 10.3322 IN. 27. 0	\$3 • 19 08 GRADIENT CAF .066620 .07140 .07140 .07140 .07180 .06967 .070035 GRADIENT	GAADIENT INTERVAL = GAADIENT INTERVAL = JOTAN13719 JOTAN13719 JOTAN13719 JOTAN13719 GAADIENT INTERVAL = GRADIENT INTERVAL = GRADIENT INTERVAL = GAADIENT	A. B. D. D. D. D. D. D. D. D. D. D. D. D. D.	PARAN = 115. RUDEER = -115. RUDELR = -115. CY 5.00 CY 5.00 1.13540 2011590 1.14660 CY CY	### ### ##############################		
1.249	000. 8.340	00980. 01111. 00881.	06760 09750 09750	09751. 09451. 07551.	.08490 .08330 .08050	-,02120 -,02120 -,03370 -,03398	02130 .02130 .13660 .01363	02460 11460 20530 02132	05130 05130 05320 -	23000	

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TABULATED SOURT 9. 7 94

SATE 28 SEP 73

- 24 + S3 + T9 CHBITER

(RBIC35) (11 WAY 73)

PARAMETRIC BATA

S.	98				
	1 #		2.61000 2.61000 2.56000 2.66000 2.69000 .00633		2.61000 2.57000 2.72000 2.71020 2.71020 .01687
, co.			CABO .06320 .06210 .06140 .06160 .06250		CABO .09590 .05320 .05320 .05400 00014
	i h # #	5.90	.14660 .06150 02210 10740 20040	5.00	CY .14090 .03530 02280 10280 18919
	ALPIA RUDER RUSTLA	-5.90/	CYN -,08360 -,03150 ,02160 ,03700 ,13340	-5.00/	CYN0794002630 .02300 .07370 .12530
		GRADIENT INTERVAL =	CBL .02670 .01460 -,01460 -,0228U -,03500 -,00445	GRADIENT INTERVAL =	CBL .02450 .01140 02050 03000 03000
		GRADIENT	CAF .06560 .0703 .07310 .07010 .06610		CAF ,07900 ,58250 ,08460 ,08290 ,08040
	, , , ,	FIN. = 3.98	CA .12880 .13270 .13390 .13200 .12860	RU/L = 2.99	CA .13490 .13570 .13690 .13690 .13690
	28,5500 IN. .0000 IN. 10,3920 IN.	63/ 5 KN	ALM 13570 15590 15910 16960 16900	937 G RB	0.00 -,1720 -,14360 -,15900 -,17260
2	11 days	RUN NO.	OS 22.000 . 22.000 . 22.000 . 2.000 . 2.000 .	FUN NO.	24390 .24390 .21690 .21390 .23609
REFERENCE SATA	2.4210 SQ.FT. 39.8490 IN. 39.8490 IN.		BETA -9.420 -4.200 .000 4.200 GAADIENT		6274 -4.190 -4.190 030, 4.190 68.490
a.	SED = 2.4		MOH 1,172 1,192 1,192 1,192 1,192		1.248 1.248 1.248 1.248 1.248

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CATE 28 SEP 75

SAG" = LAGF = EAGF = SCALE =

(RENEWS C 11 HAY 75

88 OCBING = PARANETRIC DATA 4,900 ALPHA = RUDGER = RUGGLR = AMES 11-707 IA9 ORA + 53 + 79 OYBITER .NI 0000. .NI 0000. MARIE VARIE REFERENCE CATA 2,4210 39.FT. 39,6490 IN. 39,6490 IN.

ALPHA 4.68000 4.61000 4.71000 4.70000 .00604 4,6000 4,6000 4,6000 4,7000 1,1400 1,1410 CABO .05510 .05580 .05310 .05310 .05490 .05270 .05270 -.05220 -.09420 -.17700 .05560 -.02150 -.10070 -.19150 5.00 5.00 CYN
-.06350
-.02615
.02120
.07210
.12850 CYN
-.07010
-.02260
.02260
.03730
.11690 GRACIENT INTERVAL = -5.00/ -5.00/ GRADIENT INTERVAL = .02360 .01070 .01070 .01950 .01950 .03150 .02390 .01120 .00430 ..02540 ..03290 .07890 .08890 .08890 .08880 .07930 CAF .D6S10 .D6S00 .D6S40 .D6S40 .D6S10 84/ D RVL = 3.98 3.90 CA .12800 .13030 .13110 .12630 -.00001 .13670 .13690 .13550 .13419 2.13360 Ž -.21560 -.21530 -.21550 -.22270 Q.4 -.23280 -.21470 -.20180 -.21490 -,20389 -.2079S 0 /36 28400 .28400 .29300 .29300 .30000 .29600 .28000 .29100 .30400 RUN NO. RUN ND. .31600 4.150 8.340 GRACIENT 9ETA -6.390 -4.190 .000 4.190 6.420 GRADIENT BETA -8.300 -4.140 1.170 1.190 1.190 1.190 1.190 1.248 1.248 1.248 1.248 1.248

TABULATED SOURCE FORCE DAT 1 49A

ANES 11-707 1A9 CRA + S3 + T9 CRBITER

(RBMDS7) (11 MAY 75)

PARAMETRIC CATA

	008°		ALPHA 6.71000 6.72000 6.73000 6.8900000120		ALPHA 6.66000 6.69000 6.77000 6.74000 .00969
	CRBINC		CABO .06410 .06170 .06020 .06290 .06290		CABO ,05590 ,05590 ,05220 ,05220 ,05470 ,-00008
	ALPHA = 6.909 RUCCR = -15.009 RUCCR = .000	5.00	CY .14090 .06010 01670 18690 18690	3.00	.11960 .04470 02190 16690 16690
	24 32 32 32 32 32 32 32 32 32 32 32 32 32	/66*	CYN -,08260 -,03315 ,01870 ,07140 ,12905	-5.00/	CYN -,06900 -,01670 ,02260 ,10980 ,10980
		GRADIENT INTERVAL =	CBL .02100 .01000 00390 01840 03010	GRADIENT INTERVAL = -5.00/	CBL .02230 .01000 03460 03670 03677
			CAF .96189 .96760 .96710 .96220		CAF .07710 .08170 .08440 .08150 .07860
	i i i	RWAL = 3.98	CA .12990 .12790 .12790 .12490 00023	RN/L = 2.99	CA .13260 .13550 .13670 .13470 .13330 -,00010
	28.5399 IN. .0300 IN. 10.3350 IN.	85/ D R	Q.M 25890 24910 24400 25300 25300	95/ D R	.27390 27120 26040 26410 26420
CATA	2 4367 2 4367 2 4367	FUN NO.	O 356800 35600 35600 34700 35600 45000	RUN NO.	00 00478. 00538. 00588. 00588.
A SPERENCE OF	2,4210 SA.FT. 13,8490 IN. 57,8490 IN.		-8.360 -8.360 -4.170 -000. 4.190 8.420		AT30
	SAU = 2. LAGY = 3. OKEY = 3.		1.100 1.100 1.100 1.100 1.100		1.247 1.247 1.247 1.247 1.247

•	_		000.				
7	(11 MAY 73		\$) ti	ALPIG	6.66000 6.66000 6.67000 6.83700 00120		ALPNA 6.75020 6.67020 6.71020 6.75020 .75020
	(48)(3)(4)	FARANETRIC CATA	a.900 OKBINC = -15,900 ELEVON = .900	OG C	.06530 .06310 .06090 .06170 .06440		CABO .05580 .05580 .05580 .05580
	•	PARAN	11 13 14	ა გე	.13540 .05770 01740 165570 16320	9,00	CY .11200 .03573 08030 15619 15619
			ALPHA RUDGER RUGFLE	-3.00/ CAN	07970 03240 .01690 .07090 .012580	-5.00/	CYN0594001530 .02140 .05660 .10230
	81158			CRADIENT INTERVAL =	02120. 02010. 02020 02020 02020	GRACIENT INTERVAL =	CB. .02230 .03230 .00470 01800 03010
	S3 + T9 OF			CAF	06090 .06590. .06790. .06560. .00090.	GRACIENT	CAF .07690 .06160 .08140 .06020 .07640
CATA-1A9A	AMES 11-757 1A9 CRA + S3 + T9 ORBITER		* * * *	RML = 3.97	.12860 .12840 .12440 .12440	RVL = 3.00	2320 2320 2320 23200 23300 23200 71000,
TABILATES SOURCE FORCE SATA-1A9A	AMES 11-7		28.590 IN. 2000 IN. 10.3320 IN.			NS 0 /96	AD 1.318.0. 1.317.0. 1.307.0. 1.307.0. 1.307.0.
TABULATES		i	114 1340 1340 1340 1340 1340 1340 1340 1	RUN NO.	42600 .42702 .42702 .27702 .42700	SUN NO.	43900 .43900 .43900 .42900 .42900
			E-4210 SA.FT. 39.8490 IN. 39.8490 IN. 39.8490 SA.E.		-6.350 -4.150 .010 4.200 6.440		62.30 -4.20 -2.20 -2.20 -2.20 -3.00
24 424 424 43			SAUT = 2.4 LIAST = 39.6 SCALE = 3.5.6		1,097 1,097 1,097 1,097 1,097		MACH 1,243 1,243 1,243 1,243 1,243

TABULATED SOURCE FORCE DAIN-1.149A

(11 MAY 75)	
(£6005)	SACAMETER CATA
707 1A9 :02A + \$3 + 19 ORBITER	

	ପ୍ରକୃତ୍ୟ । ଜନ୍ମ				
	D 41		4,744 -7,71000 -7,6000 -7,7000 -7,7000 -7,7000		ALPHA -7.66000 -7.65000 -7.65000 -7.66000 -7.66000 -7.66000
	-6.200 OKBINC -5.000 BLEVON		CABO .06780 .06780 .06380 .06310 .06620 06234		CABO .05370 .05270 .051270 .049270 .051270
	ALPHA = -4 RUDDER = -5 RUDPLR =	9.00	CY .22590 .10760 13590 13590 25720	2.30	CY .21090 .10500 01200 12740 23860 02783
	3 2 2	-5.00/	CYN 14500 06910 .01260 .09350 .16980	-5.00/	CYN 13310 06730 .01130 .18640
		GRADIENT INTERVAL =		GRACIENT INTERVAL =	CBL .02470 .01290 01350 02670
		GRADIENT	CAF ,06890 ,06630 ,06940 ,06940 ,06390	GRADIENT	CAF .07470 .07630 .08000 .07890 .07790
	ž ž ž	RIV. = 4.01	CA .13180 .13490 .13570 .13290 .13010 00021	RNL = 3.00	CA .12840 .12810 .13123 .12770 .12860
	.0000 IN. .0000 IN. 10.3320 IN.	997.0 RB	0.04 1.4070 1.17490 1.17490 1.17490 1.13460 1.13400	23 ü /SS	02000**
ITA	THE STATE	SUN NO.	CO	RUN NO.	O 17900 23200 101100 101100
REFERENCE DATA	2.4219 54.FT. 39.8499 IN. 39.8499 IN.		2614 -6.409 -4.180 .010 4.260 6.550		9ETA -6.300 -4.140 .010 4.219 6.439
•	SADY = 2.4 UARY = 39.6 BARY = 39.8		MACH 1.103 1.103 1.103 1.105		MACH 1.231 1.231 1.231 1.231 1.231

PAGE 31	(RB)(C) (11 MAY 73)	PARANETRIC BATA	-4.000 ORBINC = .500 -5.000 ELEVON = .000		CY CABO ALPNA .19990 .06260 -3.69000 .06730 .06370 -3.6900011339 .06010 -3.5000022140 .05370 -3.5900002365 .00043 .01666 CY CABO ALPNA .16270 .05360 -3.6600010670 .05160 -3.5000010670 .05160 -3.5000010670 .05160 -3.5000010690 .05160 -3.5000010690 .05160 -3.5000010630 .05160 -3.50000
			ALPIA :: RUDER :: RUDELY ::	-5.007 5.00	CYN119600541005410076201420015.00/ 5.0 CYN113401134005450054501355013550
	OKBITÉR			GRADIENT INTERVAL =	AF CBL .06880 .02430 .06880 .01310 .0689001240 .0693001240 .0647002780 .0000300390 .07480 .02660 .07480 .01430 .0748001780 .0787001780 .0787001780
CATA-1A9A	AMES 11-707 IA9 ORA + SS + T9 ORBITER			3.99	25 25 25 25 25 25 25 25 25 25 25 25 25 2
TABULATED SOURCE FORCE DATA-JASA	AMES 11-707		.NI 0000. =	93/ 5 RWL =	CLM .09909. .09909. .04709. .01370. .00709. .03900. .03900. .03900.
TABULATE		E CATA	2	RUN NO.	ON01000 ON01000 ON01000 ON01000 ON01000 ON01000 ON01000 ON01000 ON01000 ON01000 ON01000 ON01000 ON01000 ON01000 ON01000 ON010000 ON010000 ON010000 ON010000 ON010000 ON010000 ON010000 ON010000
DATE 28 SEF 73	•	REPERENCE CATA	SAEF = 2.4215 59.FT. LAEF = 39.6490 IN. BAEF = 39.4490 IN. SCALE = .0300 SCALE		MACH BETA 1,096 -0,400 1,096 -4,160 1,096 4,230 1,096 6,460 GRADIENT MACH BETA 1,290 -0,310 1,290 -4,140 1,290 -4,140 1,290 4,180 1,290 6,300

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(6)

TABULATED SOURCE FORCE DATA-.

8 8 (ABMOA1) (!! NAT 75 CEBTIAC = PARAMETRIC DATA ALPHA = RUDEDR = RUDELR = 5.50 GRADIENT INTERVAL = -5.99/ AMES 11-757 1A9 ORA + S3 + T9 ORBITER 28,5355 IN. .0000 IN. :0.3329 IN. : d3442 : d3444 REPERENCE DATA 2.4210 59.FT. 39.8490 IN. 39.8490 IN.

> SAEF :: LAFF :: EXFF :: SCALE ::

ALP44 .25000 .23000 .24000 .23000 .23000 2,59000 2,59000 2,59000 2,24000 2,24000 -,00119 CABO .05380 .05300 .05110 .05160 .05160 CABO .06360 .06430 .06000 .06060 .06090 Cr .16210 .07910 -.09590 -.18930 -.02151 .16760 .05270 .01320 -.10200 -.20260 CYN
-.10320
-.04549
.01150
.06719
.12910 CYN
-.09910
-.04880
.01040
.06620
.12090 -5.00/ GRACIENT INTERVAL .02690 .02690 .01440 ..01790 ..05000 CBL .02720 .01570 -.90270 -.01940 -.03019 CAF .07710 .07560 .08150 .06040 .07760 CAF .06220 .06660 .06610 .06830 .06330 52/ 0 RN/L = 3.98 13250 13260 13070 12921 CA .12800 .13090 .12910 .12820 .28820 ე .13990 EDV. -.08890 -.07900 -.08540 -.10240 0.00 -.10360 -.07670 -.96450 -.10110 -.10110 C.M -.13740 97/ 0 2 NO. RIN NO. .14200 .19700 .19700 .13800 .14300 .12100 .10000 .11500 .13870 PETA -4.310 -4.140 -3100 -300 GRADIENT 8.460 CRADIENT BETA -6.390 1.247 1.247 1.247 1.247 1.247 1.101 1.101 1.101 1.101 1.101

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BIS ATEN SCHOOL FORCE DATA-1A9/
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(KBMAR) (11 MA)	PARAMETRIC CATA
AMES 11-707 149 ORA + 55 + 79 ORBITER	444

		006				
		H II		4.68999 4.68999 4.68999 4.68999 4.72999 03129		4.64200 4.64200 4.52200 4.66000 4.69000
	PARAMETRIC CATA	OGBYC =		CABO .96290 .96160 .95960 .96070 .96040		.05500 .05500 .05210 .05210 .05350
	PARAMETR	4,000		.15400 .09660 .09660 .00830 .08310 .17290		CY 14130 .06400 .00820 .08280 .15950
		ALPIA :: RUDGER :: RUGELER ::	00' 8'00	, , , ,	50% 2.05	222228
			L = -5.00/	- 1 1	GRACIENT INTERVAL = -5.00V	11
			GRADIENT INTERVAL =		I INTERV	
			GRADIEN	CAF .06590 .06590 .05780 .05360 .05880	GRACIEN	CAF .97500 .97800 .97880 .97829
•			3.8	CA .12390 .12750 .12760 .1320 .11920	RN/L = 2.99	CA .130000 .13100 .12390 .12780 -,00018
		.NI 0982.85 .NI 0990.	1957 9 RNL 7	CLM 21900 21120 21130 21430	105/ 6 RW	21380 21380 21380 21150 22000
	•	2066 = 47862	RUN NO. 1	29900 299	RUN NO. 1	29300 29300 29300 29300 39200 -,03036
	REPERBICE DATA	2.4215 99.FT. 39.6495 IN. 39.8495 IN.		BETA -8.360 -4.170 .010 4.210 8.440		9ETA -8.289 -4.130 .010 4.180 8.390
	iz	SECT = 2.4 UNITY = 39.0 BRET = 39.0				1.245 1.245 1.245 1.245 1.245

TABLEATED SOURCE FORCE DAT 1194

(KBNC43) (11 MAY 73) PARAMETRIC BATA AMES 11-707 1A9 ORA + 53 + 19 ORBITER

	S S				
	GENCH =		4,744 6,7900 6,7900 6,7900 6,7100 6,7100		ALPHA 6.72000 6.67000 6.65000 6.70007 6.70007
	6,000 0081WC -5,000 8.EVCN .000		CABO .965393 .062903 .061391 .76190 .76190		CABO .03590 .03320 .03370 .05370 .05370
	ALPHA = 6. RUDER = -5. RUDELR = .	5.03	.14490 .184730 00630 16930 16931	8.8	CY .12530 .05290 07760 14590 14590
	3 5 5	700'5-	CYN -, 0.8390 -, 0.4250 .00560 .05600 .11070	/00'5- :	CYN -,07330 -,02360 ,00770 ,04500 ,09100
		GRADIENT INTERVAL =	CBL .02360 .012360 00120 01470 02670	GRADIENT INTERVAL =	.02440 .02240 .01220 .01200 .01500 .12660
		GRADIEN	CAF .05739 .06230 .06410 .05030 .05880	GRACIEN	CAF .07340 .97770 .97780 .97665 .97280
	<u> </u>	RN/L = 3.97	CA .12280 .12540 .12590 .12220 00036	RVL = 3.01	.12890 .13100 .13080 .13030 .12810
	.NI 0000. .NI 0000. .NI 0233.01.	847.0	ALA - 35030 - 28350 - 28350 - 28350 - 372500	99/ 0	Q.M 31940 31590 31590 31440 31420
*	11 H GRCZ	RUN NO.	08 .42300 .41400 .42600 .42600	AGN NO.	0.4370. .4820. .4860. .4390. .4300.
REFERENCE DATA	2.42:5 53.FT. 39.8496 IN. 39.8490 IN. .0305 SCALE		-6.320 -4.150 -0.10 -0.10 4.210 6.460		9ETA -8.240 -4.100 .010 4.180 6.370
	SATE 2 LATE 39 BATE 39		MACH 1.101 1.103 1.103 1.103 1.103		MACH 1.249 1.249 1.245 1.245

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2	č.		-1.20	666						8	8	8 1	B 1	} {) E	3 8	.	} {	i.			9	8	8	0	8		8			P.				聚合	9	1	. ೧೯೮೮	30000	1000	0000	000000	£ 9 E.	
3944	(11 MAY 73		# ₩	" 2					META.	0.00	COL.	07.50			22020		Church		a' d		BETA		CHE	COCCO.	COLUMN TO	00000	1200	00026		0.20			SETA SE	0000	が一般の	فالملاك	自然的に	B	2	20	F.	P.	1 21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
		CATA	CKBINK	ELEVON :					383	.04560	.0496J	06490	.54435	276		CICAL.	Carried Control		• (EE) 10		œ	09060	02050	01690	34820	06690	G6716	01170	34760	0067	00015		CABC	01190	08070	.06140	U6U31	£1650.	0.8650	.0397P	0.3920	02650	¥3005*	
	(#B#D44)	PARANETRIC CATA		86	8				3	c.			e.	ត្		a c		,	-		3	٠.			-1						•		J										•	
		PAS	•	ĸ	RUPLE =			9.00	۲	-,00760	00760	-,00010	00760	- 10030	-, 20690	-,00700	16501	7077	.00025	3.33	Շ	-,01580	-,51150	01160	51030	-, 20949	-,00640	-,99619	00530	- 00260	99:22:	30.8	٥		00319	0310	00353	03320	04270	04000	S200	.95133	345-50.	
				5	SUS.			-5.99/	Ē	.00530	.0530	00560	.90549	07570	2000.	26900	2700	01000	915555-	700.8- :	ž	173867	i de la la	G19G5	00800	05400	00330	01800.	00450	50255	17:20	-5.967	ž	יייי	59136	Dane.	00210	20170	8	100000	1000	100000	26333	
	KB11ER							GRADIENT INTERVAL =	ŧ	GPOGG"-	00020	01000	-,00040	-,00045	-,00000	-,00040	06000	-,00060	endon.	GEADIENT INTERVAL =	ē		GE STATE	1	12016	-,91115	02100-	-,00100	-,00070	00159	50000	GRADIENT INTERVAL =	ę	9 8	98966	69000	Distriction -	0603-0	Const.	LOCALLY T	Carrier .		0000	
	8 + 19 0							GRADIEN	34		06900	00110.	01350	.91419	.01330	.01130	02200	09100	94656		Ų	3	66120	Decent.	0022	12000	C6725	192497	02840	.02330	-,00007		ļ	.	012/0	0.220	100.60	DE LE	00140	in the second	0001/33	00000	Server.	
E SATA-1A9A	AMES 11-707 IA9 ORA + S3 + T9 OKBITER			z z	į,	ż		RML = 4.05	3	5	Charle	09880	09780	.05630	05730	.05430	05030	02570	\$6000°-	RWL = 4.49	i	5	06240	0000	06140	26670.	250	100120	ממשבני	07240	22000-	RN/L = 3.98	i	5	13330	13555	00000	Deiti.	23325	1316	0.7561.	1309	.12820	
TABULATED SOURCE FORCE DATA-1A9A	AMES 11-7			28.5300 IN.	. M. C. C. C. C. C. C. C. C. C. C. C. C. C.	10,3325 IN.		157/ O R		5	DE CE .	10801	14740	C95.C	21120	08419	13530	18370	02359	1087 G		Š	25125	16120	. 199950	0927	90920	0.000	045	- PGZ269	-,72578	8 5 /60 1		Ş	.26620	1991.	CESES.	25.470.	i Perio	56619	13730	19450	-,23249	
TABULATED		*				14 d'842		NO.		6	00602*-	2227-	- 13500	un en	id Ball	00221	19600	2680	23462	2		ć	00606	22800	14300	06300	00010	00690	Capal.	20000	22780.	S. S. S. S. S. S. S. S. S. S. S. S. S. S		5	-,35399	26500	-,18300		-,00100	ບິດ 9 6ປີ*	.19120	27700	.32620	1
		ererelyer Cata		2.4219 SQ.FT.	39,6497 IN.	39.64971 IN.	.0306 SCALE			APPLA	-9.330	092.7-	-3.240	-3.5.	56		4.975		CEARTENT			ALFIER	9.390	-7,339	-5.280	-3.135	-1.190	. 830	2.890	4.910	6.930 GEACTENT			ALPHA	962.6-	-7.210	-5.20	-3.275	-1.150	G69.	2.665	4.943	196°9	- P. L. T. C. C. S.
CA T 28 SEP 73		u	•	SREF = 2.4	UREF = 39.6	BREF = 39.6	# E			W.C.	6.39		008		9.	38.	9		376			NAO.	106.	106.	106.	106	106*	106.	106.	106.	106°			HACH	1.103	1,103	1.103	1.103	1.103	1.103	1.103	1.193	1.193	

CENTRAL EST NAME TO

AMES 11-707 IA9 CRA + S3 + T9 GRBITES

	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	888888888
CATA	2000 2000 1000 1000 1000 1000 1000 1000	66.007 - \$1.0007 50.0027 - 52.1507 50.0027 - 50.1507 50.0027 - 50.1
PAGANETRIC CATA	8 8 8 6 8 8	និ ម៉ូ ឆ្នាំ ឆ្នាំ ឆ្នាំ ឆ្នាំ ឆ្នាំ ឆ្នាំ ឆ្នាំ ឆ្នាំ
AFA	SETA = RUCOSR = RUCORE =	3,22 CA CA CA CA CA CA CA CA CA CA
	8 2 2	-5.00.4 CON 100.000 10
		GRADIENT INTERVAL = JAP GRADI
		CAF 1970 .07870 .07870 .08700 .08700 .08200 .08300 .08300
	in. In	GUL = 3,00 CA .13280 .13380 .13280 .13280 .13810 .13810 .13820 .13820 .13820
	28.5350 IN. .0505 IN. 15.3356 IN.	115/ 0 GW CLM .25659 .18830 .18830 .55870 07020 12960 24830
2	= d34x	0 N NO. - 3800 - 15705 - 15705 - 15705 - 15705 - 17805 - 17805 - 17805 - 17805 - 17805 - 17805 - 17805 - 17805 - 17805
REPERENCE CATA	2,4210 53.FT. 39,6490 IN. 39,9495 IN.	4,044 -9,320 -7,220 -5,180 -3,220 -1,180 -1,
	Section 39, Care 1999 Section 1	062*1 062*1 062*1 062*1 062*1 062*1

24 450 EC 3474		TABLEATER	tabllated sokke fukee bata-1a9a	E CATA-1A9A						PASE 97
			AMES 21-79	AMES 11-707 149 ORA + 53 + T9 SAH BOUSTEF	2 67 + 22 -	AN BOCSTEF			(Kenen)	E 22 AM 22 3
•	GFFFFFE CATA	2						PAEA	PARANETRIC SATA	
							BETA	#	MEET COURT	•
	2.4215 SQ.FT.	XX XX XX XX XX XX XX XX XX XX XX XX XX	28.5355 IN.	يونو			RUDGER	81	.DOG ELEVON =	
	39.6495 IN.	11 0340	.NI 0000.	: <u>-</u> :			FUCFLR		500	
		FUN NO.	3/ 0 KN	ENT = 4.02		GRADIENT INTERVAL =	-5.05/	8.33		
			;	;	ų	8	ž	ځ	SBS	EC.'A
•O#	AFR	5	9		61600	01000	.51639	-,02670	064.70	Carrier -
.	-8.510	00000	CONT.	09740	21978	-,00010	COTTOG.	- 30359	11300	
	6.40	20150-	DYSTO.	CT-050.	.01250	-,90019		00510	e de la companya de l	
	-2.370	-,01300	COUCC.	£6660°	.01320	-,00019	2651D		577	2000
	LY8	00206*-	-,955996	.05980	01540	00019	1010°-		8	QUEST!
108	1.660	30600	-,0:030	023960	01510.	CERTAIN -	076.0	31938	04550	00060
.601	3.643	.01830	-,01415	03960	2000	BOOCO	-,95590	01030	6688	0000
.60	5.630	52850	014 10°-	e de l'action	01340	30000	.90320	-,00615	D4840.	Course.
.60	7.720 CRACIENT	.00326	07229	10000	91000	30000	-,09035	.00.23	-,00016	£249
		RUN NO.	\$ u /s	RVL = 4.50		GRADIENT INTERVAL =	-5.98/	5.90		
				i	į	ē	2	Շ	3	BE:1A
10	ALPHA	ð	g.	5	3	Gallado -	91160	emso	E 180	1,000
\$06.	-8.510	03100	01116	13670	67846	01000	-,07245	-,01539	£55000	. 14 (15.5)
506.	6.400	03700	CARGO CARGO	6876	:02663	-,00016	51319	02010	Đ.	
506	24.40	10000	0.000	57250	52860	00010	52199	00620		
6 8	C#5.3-	0000	-,00430	02940.	32990	3000				
	1.750	130600	-,01230	.07619	52883	STATE OF	193236-			(10)
506	3,695	00020	-,01780	37780	52626	32000	19861	0.00	06690	Caraca Ca
£79.	5.693	DUGGEU.	02240	57875	urazu.	Testa.	(#DE)	01143		- C. C. S. S.
908	7.73	20:50	-,02660	Distr.	01220	GEORGE	01490	12 July 1	6623G	
£.36°	9.720	58500	00271	20002	12000	TOWNS.	00011	4		750 °C
		RUN NO.	67 ti Ri	RN/L = 4.00		CRADIENT INTERVAL	100.8- =	8.0		
				i	Ų	É	ž	દ	Ses	8 534
# C	ALPHA	3	ر الله الله	3	18050	00000	1.000	643tS	P 98	26.27
1.104	-8.97	00000	(Major)	02260	03490	00000	-,00739	- 19533		
\$05°	-6.47	GORGE -	0.0270	C#660*	19750.	00000	02173	12261		Gen.
	196 C-	50818*-	-,951,00	15140	31103	Medica.	58625°-	57.4455°	L SHIP TO	المام المام
	320	09599	- 17.485	.15160	:0429D		::5253:-			H.C.1.41
90.2.1	1.685	1000cm	Tes:00*-	.10150	025	CONT.	100000°	Editor.	30030	5 T.
1.194	3,630	00910*	-,01525	19291		O CAROLINA	A STATE OF	5115	02590	1000000
1.194	5.680	£12613	2000 -	12503	120 May 14	Section .	Res	Description -	E1860.	
1.174	7.67	14000	- 3256-	Grant.		TOTAL TOTAL	B1666		5.000 E	90.3
1.194	9.663		(3555);	Security .	# 100 CO	100000	-,95092	₹ 3.65°	100 C	F 1 1 1 1 1 1 1 1 1 1
	GRACIENT	A N) ()							

TABLLATED SOURCE FORCE DATA-1AST

Company of the party of the company

AMES 11-707 1A9 ORA + 53 + 79 SHM BLOSTED

	k 8	
2000		
PARANETIC CATA	96. 88.	
a.	BETA : RICOST : RICOST :	3.06/ 5.00
		RUN NO. 7/ 5 RW/L = 3.50 GROIENT INTERVIL = -5.06/ 5.05
		8
	28,5350 IN. 7,2950 IN. .0006 IN.	7/5 FNC =
SATA		RUN NO.
OFFICE OA	7 = 2.4210 SA.FT. X 7 = 39.4490 IN. Y 7 = 39.6490 IN. Z E = 5305 SCALE	
	SAGY :: LASY :: BASY :: SCALE ::	

961301 00051 00051 00051 00051 00051 00051 00051
8 4 6 4 6 6 6 6 6 6 6 6
921.0 921.0 921.0 920.0 90.0 9
0.0000 .0.0000 .0.0000 .0.0000 .0.0000 .0.0000 .0.0000 .0.0000 .0.0000
0.04490 .04490 .04600 .09100 .09290 .09310 .09310 .09500 .09500
.00935 .00935 .00350 .00350 00350 01120 01120 01930 01930
0 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000
-6.510 -6.430 -6.430 -2.540 -2.540 1.790 5.740 9.720 8.720 8.720 9.720
562 562 562 562 563 563 563 563 563 563 563 563 563 563

8 8 (RBM (2) (11 HAY 73 27000 270000 270000 270000 210000 210000 16000 14000 16000 16000 15000 15000 16000 15000 12000 12000 16000 16000 .01000 .01000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 OCBING = PARAMETRIC CATA CABS .06390 .06390 .05150 .05690 .05660 .05660 .05150 .06110 CABS .04690 .04470 .04470 .04470 .04870 .04690 .04690 .04691 2,085 0,095 0,047 0,047 0,047 0,047 0,048 0,050 000 C7
--.03319
--.00700
--.00700
--.00700
--.00700
--.00700
--.00700
--.00700 BETA :: RUDDER :: RUDPLR :: CCTN
...00280
...01170
...01170
...03190
...03190
...03140
...03140
...03140
...03140 CYN
...00800
-...00800
-...01660
-...02500
-...02500
-...02500
-...01580 -5.00/ GRADIENT INTERVAL = -5.507 -5.00/ AMES 11-707 1A9 CRA + S3 + T9 SRM BOOSTER INTERVAL 180 20000 20 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 GRACIENT GRACIENT CAF .03400 .03400 .03690 .03690 .04180 .04130 .03940 .02190 .02450 .02450 .02670 .02890 .02890 .02890 .02890 .02430 CAF 202060 201060 201060 201060 201060 201090 20100 20100 20100 20100 20100 20100 20100 20100 20100 8/ 0 RML = 4.01 TABULATED SOURCE FORCE DATA-1ASA CA -0.7310 -0.7410 -0.7430 -0.7560 -0.7560 -0.7760 -0.7620 -0.7620 CA .09330 .09300 .09300 .10100 .10100 .10100 .10100 .10300 .10300 CA .05740 .05780 .05580 .05580 .05580 .05580 .05000 .06000 28,5399 IN. 7,2999 IN. 0.000 0.0000 0.0000 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 00.4 .00529 .00529 .00529 .00529 .00529 .00529 .00529 .00529 .00529 0.1870 .01570 .00000 .00000 ...00100 ...01100 ...11150 ...11150 ...11150 ...11150 ...11150 00 - 105400 - 105400 - 105500 - 105000 - 105000 - 105000 - 105000 - 105000 RUN NO. 00250.00250.00250.00250.00250.00250.00250.00250.00250.00250.00250.00250.-RUN NO. 00 -.05200 -.05200 -.05300 -.01300 -.01300 -.01300 .04100 .04100 REN NO. XMRP YMRP ZMRP REPEREDICE CATA 2.4210 59.FT. 39.6490 IN. 39.6490 IN. 4.390 4.390 4.390 -2.290 -2.290 1.710 3.730 5.740 7.750 7.750 4,435 -6,319 -6,319 -2,380 -,400 1,639 1,649 3,649 7,649 7,649 ALPHA -6.500 -6.470 -7.2500 -2.360 1.660 3.690 9.770 7.773 1.192 1.192 1.192 1.192 1.192 1.192 1.192 1.192 1.192 URET BRIEF SCALE

(4,891102) (11 447 73)

		88	
	EATA	CKBING ::	
	PARAMETRIC CATA	800. 800.	
		BETA = RUDSER = RUSER	RUN NO. 38/ D RN/L = 2.98 GRADIENT INTERVAL = -5,00/ 5,00
			2.98
		28.5300 IN. 7.2900 IN. .2000 IN.	RNJ
ì			38/ 5
	4 2	XXXX = XXXX = XXXXX = XXXXX = XXXXX	RUN NO.
	REFERENCE DATA	2,4210 59,FT. 39,8490 IN. 39,8490 IN.	

SAEF = SAEF = SCALE = SCALE =

9ETA 19000 11000 11000 19000 19000 11000 11000 11000 11000 11000	1600 1700 1700 1700 1700 1600 1600 1700 17
0.886 .05390 .05380 .05140 .05140 .05180 .05390 .05390	CABS .05590 .05280 .05160 .05100 .05100 .05020 .05080 .05250
C7 04100 07202 . 04420 . 04460 . 03160 . 03160 . 03060	CY 03969 03969 03960 04040 03540 01769 011769
CTN .00730 -,00801 -,02400 -,03730 -,03730 -,03730 -,02150 -,02150 -,021570 -,01270	CYN CYN DOWN - DOTHO -
90 100000000000000000000000000000000000	OB
CAF .02889 .03289 .03289 .04149 .04289 .04289 .04299 .04199	GRADIBAT CAF .02900 .03150 .03500 .03600 .03950 .04120 .04120
CA .08610 .08610 .09610 .09740 .09740 .09740	AVA = 3.01 CA .08250 .08460 .08780 .08780 .08980 .09030 .09030
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	A4 / 0 / 84 / 0 / 84 / 0 / 84 / 0 / 84 / 0 / 84 / 9 / 9 / 9 / 9 / 9 / 9 / 9 / 9 / 9 /
0080 00820 00820 00820 00000. 00000. 00820. 00820.	ON NO. ON 06400 04600 03200 03800 03800 03800 03800 03800 03800
ALPHA -9.590 -6.480 -2.310 290 1.710 3.670 5.710 7.740 68ADIENT	ALPHA -6.570 -6.420 -4.370 -2.320 -7.320 1.720 5.770 7.760
MACH 1.249 1.249 1.249 1.249 1.249 1.249	# # # # # # # # # # # # # # # # # # #

CATE 20 SEP 73	r	TABULATEE	TABLLATED SOLFICE FORCE DATA-1A9A	E CATA-1A9A						PAGE	=
			AMES 11-7	AMES 11-707 1A9 ORA + \$3 + T9 SRM 300STER	S eT + 82	ZN SOOSTER		•	(REPORTOR)	(11 MAY 75	^
	CFFEERER DATA	SATA						PARAM	PARAVETRIC DATA		
							•	,	A. P.Y. ORBING		605
- 68	2.4219 SA.FT.	r. xoen =	20.5300 IN.	ż						11	900
61	39.8499 IN.	THE GRAY	7.2900 IN.	ż			R POLIS	*	000		
Þ	.NI 0679.6E	ZHRP =	.NI 0000.	ż							
**	SOOD SCALE	4.1		•							
•		RUN NO.	9/0	FOV. = 4.01	GRADIENT	GRADIENT INTERVAL =	-5.00/	3.00			
			;	;	746	ŧ	ž	Շ	CABS	APP	
			5	5	00,000	01000	00500	.00330	.05420	-6. \$0000	
. 595		•	0.000	.03000	26900	01000	00000	00570	.05330	-0.48000	
.99	9-000		CARRO	07860	07500.	01000*-	00900	01690	.05310	-6.47000	
. 599			02750	05820	09700.	acaco.	£110°	02210	09060	-0.47.00 - 44.00	
666.			01570	.05760	09600*	00000	.01350	06220*-	orese.		
86.	•		02100	0.05670	.00840	00000	0,010.	06410	0.000	Table 9	
996.		•	Cecto	.05470	.00495	00000	07700	01260	Casa C	-0. Senio	
r.			C#32C -	09260	00000	00000	C2200	0.000	2000	4 4700	
960.			-, 3392C	.05110	36955	00000	00170	00900	Section .	ENSK!	
	9		**************************************	190000-	.00035	0000	•0000	TEXTON.			
•		2 2 0	6 /6t	RVL = 4.49		GRADIENT INTERVAL =	/00*5-	9.00			
		<u>;</u>						į	187	A: PHA	
	į	č	Ş	ð	ž	e	ž	5		days a-	
5		,	01290	.07480	069₹	-,00019	01170	1000	Seren.	0000	
006	136'1- 0		00050	06270.	G69 IS.	0.00010	00470	06800	136601	0.55550	
0.6			03610	07570.	Brig.	00.00	00100	-,01840	Caccu.	6.535.00	
66.				07330	02610	.0000	.00330	02640	.05410	-0.345.0- 0.40000	
DE 6			20349	02170.	.002.00	90000	09010	03910	0.000	1000 P	
98. 8			01640	07890.	09020	00000	(360)	03680	0.000	-A Keyer	
006			02930	.06620	201790	00000	Cesto.	-, 03030	200	-8.73000	
9.5			CHESTS -	04090	.01490	00000	02520	0.630	April 1	-,00244	
¥.	ક		00642	-,00059	6£0303	10000	611031				
		Z Z	23/62 B	RNVL = 3.99		GRADIENT INTERVAL =	/GG*\$-	3.00			
		•					;	ł	CABC	ALPHA	
2	# DETA	8	Š	ð	ኔ	ed :	N.C.	- 10.50	06690	-6.65000	
	_	314450	08650*	07001.	.03080	00010	02110-	200	CEUZO	9-6.64000	
			.54760	.10050	02030	0.000	00000	CONTRACT -	06790	-8.64000	
			.03470	0266G*	03130	9999	130.4.4.	0000	USALO	-8,67000	
			02610.	.09710	03100	00000	00000	000000	0.6390	CCC69.8-	
			07470	13420	03110	DCGGGG.	619/66	G116:00-		Oct. OL	
ici.	**		36355	08160.	01060*	00000	02700	04460	08480	-8. 74:19:21	
101.1			-,02200	COSSU.	. ೧೭೮೯೮	GGGGG.	01500	09/50-	CENSU.	-A. 79/199	
			-,53510	00980.	£72970.	COCOC:	00100		COCC.	GC 58.8-	
			-,34430	.08440	.02810	00000	02500	5,000	AC 100 -	9110	
101 · 1	į		- 00.673	96,000,-	00012	00000	62555	- 1. F. 1. S.	1 3 4 15 1 4	1	

TABULATED SOURCE FORCE DATA-1A9A

AMES 11-707 1A9 CRA + 53 + 79 SRM BOCSTER

PARAMETRIC CATA

(REMINS) (11 MAT 75)

	8 6		
	GLEVON =		ALPNA ALPNA -6.45000 -6.45000 -6.44000 -6.46000 -6.49000 -6.55000 -6.55000
	85 al 000;		CABS
	ALPHA = .	8.90	04 -,01130 -,026430 -,02630 -,04020 -,04020 -,03520 -,03520 -,03520 -,03520
	A B B	-9.00/	CYN -, 20650 -, 20160 -, 20160 -, 20170 -, 20110 -, 20110 -, 20110
		CRACIENT INTERVAL =	40 00000 00000 00000 00000 00000 00000 0000
		CRADIENT	CAF ,03440 ,03240 ,02240 ,02240 ,02340 ,03300 ,022470
	ï. ï.	RN/L = 3.00	CA .09520 .09520 .09520 .08580 .08530 .08440 .08140
	23,5570 IN. 7,2905 IN. .0000 IN.	39/ O R	CLM .05280. .03730. .03730. .02200. .03490. .03490. .03490.
<u>.</u>	2067 2067 2067	RUN NO.	0. -15900 -15900 -05900 -05200 -05200 -05300 -05300
REPERENCE GAIA	2.4215 50.FT. 39.8495 IN. 39.8495 IN. .5350 SCALE		2.280 2.280 2.280 2.280 6.420 6.420
-	SATE : 2.4 UNET : 39.6 BATE : 39.6		MACH 1.248 1.248 1.248 1.248 1.248 1.248
	3 7 2 3	•	

CATE 20 SEF 73		TABULATED	SOURCE FOR	TABULATED SOURCE FORCE BATA-1A9A						PAGE	2
			AMES 11-1	AMES 11-707 1A9 ORA + S3 + 79 SGH BOOSTER	8 et + 8	ON BOOSTER			(RBM154)	(11 MAY 73	•
	COTOTERNOE CATA	1 1						PARA	PARANETRIC DATA		
3		<u> </u>	!				ALPHA	Ħ	-6.000 ORBINC	1 1	908
2.4	2.4219 54.FT.	11 d380X	26.5399 IN. 7.2909 IN.	i i			RUDDER		.930 ELEV	ELEVON =	000
		ZHEFF =	.NI 0000.	ž			RUDFLA	<u>"</u>			
SCALE =	STATE STATE							8			
		RUN NO.	15/ n R	RN/L = 3.99		GRADIENT INTERVAL =	-5.00/	8.6			
	į	ð	2	5	ż	é	£	გ	CABS	ALPHA	
Š	DETA	5	12697	G9G9G*	00040	-,00010	01420	09020	02250	46.00	
866.	200° 4	0090	DESET.	.06030	.00840	01000	06600	06810.	0.0260	-6.46000	
	4.919	00226-	36620*	06650.	£660G*	00019	09500*-	organo.	09490	-6.48000	
8	-1.990	05490	.01860	.05849	.91989	00019	90319	260.00	Carrier Control	6.495.0	
	080	-,93700	00900	.05800	07110.	00000	02280	00000	0.000	6.50000	
	2,060	02000	-,00220	.05750	.01349	00000	CO. C.	61635	04310	6.52000	
	060.4	00906	01170	.05530	.01240	00000	-,00190	GIACO.	66.90	6.54220	
	6.140	00600	02230	.05400	01010	00000	03380	00000	06000	-6.58200	
		00120	03160	25170	05100.	00000	06800	0.000	Tellan.	16704	
?	GRADIENT	02800	-,90519	-,90044	.00041	10000	.00043	-	600000		
		RUN NO.	20 / D R	RVA. = 4.49		CRADIENT INTERVAL =	-5.99/	3.00			
			;	3	7	ŧ	ž	Շ	CABS	ALPHA	
ğ	BETA	5		5	0.00	01000	-,02080	.02160	.05850	-6.51000	
666	-6.019	-,11490	orsec.	06170.	01610	07010	01530	.01220	.05740	-6.51000	
668 .	-5.960	00460	ene.	069/01	Chest.	01000	01040	.00360	.05300	-6.52000	
66	-3.930	07500	0	01676	D2310	01000	00739	00240	.05110	-6.54000	
.89	-1.695	.05720	26.10.	02570.	00820	CCCCC	-, D0349	0.00970	.04739	-6.58000	
660.	2.219	- UZCK.	orcoc.	OCCUPATION OF THE PARTY OF THE	02840	COCCE	-,00190	01270	.04519	-6,60000	
668.	4.27	00200	Cearo:-	CACA.	02220	00000	-,00850	-,00620	.04560	-6.65000	
669.	6.373	0.137.0	(292).	COOC.	01810	00000	-,01460	-,00045	.04500	-6.67000	
e9.	0.470	0.0000	2010101-	00057	0000	10000	20100	-,00195	96000-	00976	
	CRACIENI	7690					8	5			
		RUN NO.	377.D R	RN/L = 3.99		GRADIENT INTERVAL =	/3: C-	300			
		į	3	3	3	ਵੱ	Š	Շ	CABS	K.FHA	
Š	BETA	8	18387	40440	03470	-,00010	02050	01830	G869G*	-6.51900	
1.090	-8.320	-,1600	College College	19290	03370	00000	01620	00010	.06920	-6.5(0)	
1.096	0.6.6	0.06.0	CARCI	15120	.03439	00000	01410	.00549	06990*	-6.510kg	
1.096	-3.90	GCOVIC-	1986	07880.	.03395	00000	01260	.00100	06790	-6.535.82	
1.096	-1.840	00000	1960	09860	.03440	00000	-, 0:0990	00470	00650.	-6.580.19	
1.096	2.20	poetic*-	01620-	04680	03390	00000	-,61020	00580	.05580	-6.61PP	
6 60.	4.33	0.00.0	13560	.08820	.03250	00000	01359	00430	.05570	-6.63989	
1.093	6.489	COLUMN TO SERVICE	-,04540	01880.	02020	00000	02110	.00180	.05770	-6.68352	
1.793	6.60	97946	19:50	99137	-, 19:00:1	00000	.00051	00136	00136		
	CHALLENI	\$1.5 das									

(REMIDA) (11 MAY 73)

PARAMETRIC CATA AMES 11-707 1A9 CZA + 53 + 79 SEM BOTSILE

8 8 OKBING = ELEVON = -6.999 86. ALPHA = RUGUER = RUDPLR = 5.00 49/ G RIVL = 3.00 GRADIBIT INTERVAL = +5.00/ 28.5355 IN. 7.2955 IN. .0005 IN. tt - #1 - #1 RUN NO. XMRP YMRP ZMRP REFERENCE DATA 2.4210 59.FT. 39.6490 IN. 39.6496 IN. SAUF ...

6.50000 6.50000 6.40000 6.40000 6.50000 6.50000 6.50000 CABS .05840 .05840 .05820 .05810 .05810 .05140 .05010 C7 .01410 .00630 .00140 ..00240 ..00710 ..00780 ..00780 CYN
-.01810
-.01340
-.01380
-.01080
-.01080
-.01080
-.01200
-.01200
-.01200 CAF 0.03940 0.03720 0.03530 0.03530 0.03500 0.03200 0.03200 0.03500 CA .09780 .09520 .09520 .08600 .08600 .08680 .08280 .08280 .08280 QLM .05320 .04190 .04190 ..01730 ..02110 ..03400 ..0440 00 1.12300 1.12300 1.13610 1.1 -5.970 -3.930 -1.660 -2.235 4.290 6.370 6.370 8.450 GRACIENT 9CTA -6,990 1.243 1.243 1.243 1.243 1.243 1.243 1.243

CATE 28 SEP 73		TABLLATED	SOURCE FORCE	TABLEATED SOURCE FORCE CATA-1A9A	•	1					
			ANES 11-1	AMES 11-707 1A9 OEA + S3 + T9 SRN BOOSTER	20 + 13 5	2N BOOSTER		5	(ROM195)		•
		į						PARAM	PARANETRIC CATA		
w .	REPERENCE CATA	Y					i		\$1630 Oct	•	906
			NI 0082.82	ż			ALPHA	e t :		• •	000
p	2.4210 Sec. 1.		7.2900 IN.	ż			אנסטצ	81			
LACT : 39.0	39.8495 IN. 39.8495 IN.		.0000 IN.	ž			RUPTLR	i †	281.		
} 	DESTO SCALE										
		FUN NO.	11/0 10	FUL = 3.97	GRACIENT	GRACIENT INTERVAL =	/00`;-	9.30			
						į	į	٤	CABS	APPLA	
		8	5	5	Š	Ę			0.5520	4.35900	
5		00620	.97250	01090	.01490	20006	-,01210		CLEAR	-4,51000	
		COCCO	51300	00950	.01330	00000	-,0000	03000	(E2747)	4,53000	
		CHEST	02160	.05449	O1170.	00000	00rd	0690	0.000	-4.57900	
96. 6	6.5	00226	-, 03019	.05340	G#600*	00000	01390	- 2014	2000	19660	
PK.	CRACIENT	7980G.	-, 92382	-, 20191	00039	00000	.0.7.0	2000			
		9	2	RNA = 4.49		GRADIENT INTERVAL =	/00'5-	3.90			
		5				į	2	٤	CABS	ALPHA	
		č	3	ð	ჯ	ď		00000	04740	4,42000	
ð	DE TA	S S	07070	08080	.02319	00010	-,02650	0.000	01100	A APPROX	
666.	130.6	00000	Citien	.97860	01620.	01000:-	02610	05250	Geren.	44900	
669.	5.970	00000	1961	04770.	07520	-,00019	02240	15520	277600	4477	
669.	3.950	00160		0,07610	02720	00000	01890	12.20	01640	10000	
£.	1.900	0.950	00200	02520	09120	00000	01320	06600	2000		
668.	2.200	orana-	94.0	RILL	027750	GCCCC.	01140	.00560	Cirri.		
.	4.250	0300	00000	06960	06450	00000	01649	00000	3000		
660.	6.350	2010.	Carolina Car	06820	CACSC	gaaac.	02145	.01260	Carrie	2000	
66.	6.460	.02900	0.0500	DZ(444) -	22000	10000	.00135	00249	-,000	1600-	
	CRADIENT	£1900°									
		SUN NO.	31/ 0 8	RVL = 3.99		GRADIENT INTERVAL =	-5.00/	9,00			
					•	ě	ž	Շ	CABS	ALPMA	
Ž	BETA	ć	Š	5	3	9	1000	03640	00.90	-4. 40CPU	
	-6,060	G0660*-	.04480	.10560	. 3986.	- 100010	10267	03460	.067 6 0	-4.40000	
	100.5	0760£	CASEC.	.19519	96460.	- 15 m	2.960	THE REAL PROPERTY.	1645G	14.49EV	
1.1.2		00750	.02185	.19339	13861	-,00019	21020	13041	01290	-4.51000	
201.1		12.176	02010	.10080	03870	-,55015	:0C):-	20000	04745	-4,55mm	
1.100	110.11	Calebra -	0,010	09440	06963*	00000	02106	1.66 A11.		-4.59TR	
1.199	7.5.5	CASO C	09020-	21160.	0372B	00000	19525	36710.	10000	CE 200 1	
1.100	.310	Caract	3:63	£3894£	.73460	00000	06220**	10000	THE STATE	CLE 69-1-	
1.100	0.460		G9-07-0"-	C8060	.03230	00000	07080	12.52.5	10000	71165	
1.100	200.5	44400	21500-	-,00150	-,52025	10000	72002	18:31:-			
	CRACIENT	1000000									

TABLE - TEC SOURCE FORCE DATA TITLE

(RBM105) (11 NAY 75)

AMES 11-707 IA9 ORA + S3 + T9 SRM BOC-3TER

CKBING = PARAMETRIC SATA 000 ALPAA = RUDDER = RUDDER = 28.5300 IN. 7.2900 IN. .0000 IN. 10467 = 10467 = 2045 = 10462 REPERENCE CATA 2.4210 59.FT. 39.8490 IN. 39.8497 IN. .0300 SCALE

SANT SANT

8 8

4,31000 -4,32000 -4,32000 -4,35000 -4,42000 -4,46700 CCC67.4--.91121 CABS .05850 .05790 .05790 .05150 .05150 .05010 .05010 .05000 04240 .02260 .02260 .02610 .01520 .01520 .01530 .01510 CRADIENT INTERVAL = -5.00/ 5.00 CTN
-, 03090
-, 02390
-, 02390
-, 02390
-, 02480
-, 02480
-, 02480
-, 02480
-, 02480 41/ 5 FIVE = 3.50 CA .09910 .09910 .09980 .099100 .08880 .08880 .08880 .08880 01.4 0.04740 0.03900 0.0200 0.01260 0.0200 0.03020 0.03020 0.03050 ON - 199900 - 196100 - 196100 - 196100 - 199900 - 199900 - 199900 - 199900 - 199900 RUN NO. 9ETA -8.540 -5.940 -1.880 2.220 4.270 6.340 6.340 MACH 1.245 1.245 1.245 1.245 1.245 1.245

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SATE 20 SEP 73		TABULATED	SOURCE FOR	tabulated source force Bata-1A9A			1			PACE	5
			AVES 11-	AES 11-707 1A9 0EA + 53 + T9 SAN BOOSTER	8 6 + 8	RM BOOSTER			(KBM106)	(11 MAY 73	_
	REFERENCE DATA	4						PARA	PARANETRIC CATA		
							A P. C.	11	-2.000 OCBINE	*1	306
**	2.4210 SQ.FT.	11 d 300 x	26.5300 IN.	z z			3	**	_	ELEVON = .5	8
	39.8495 IN.	11 d342	.NI GCCC.	ž.			3	RUPLR =	900		
		RUN NO.	12/0 4	FIVT = 3.97	GRADIENT	GRADIENT INTERVAL =	-9.00/	9.30			
		į	;	3	1	é	ž	Շ	CASS	ALPIG	
MON	DETA	2		96.	.01460	01000	-,09010	.04730	04940	-e.390co	
		- 24100	21730	.06030	.53470	00000	02550	06030	200	-2.40700	
900	900-4-	00000	CPCTG.	.06240	.91429	00000		00000		COUNTY C	
666	-1.970	01800	0320	.06180	21810.	00000	C6C2C-	03350	74417	-2.4EPE	
665	080	01200	00180	00090	.01595	GARAG.	-,01920		04590	-2.43200	
665	2.090	-,00200	00820	.05870	.01520	00000	Orego.		00270	-2.44000	
.599	4.120	COSCC.	01410	.05710	.01510	00000	02110-	נצטוני	04430	-2,4500.	
.599	6.160	.01400	07610	.05685	06215.	2000	CANAD -	0610	02970	-2.48000	
86:	6.227	00020	32560	.05590	07800.	20220	96104	-,00228	27000	-,125542	
	CRADIENT	£27.03.	77298	00067	2	7777					
		SON NO.	6 /22	RNL = 4.49	GRADIEN	GRADIENT INTERVAL =	-5.90/	9.00			
			;	į	19	ŧ	8	Շ	CABS	ALPPA	
Ď	BETA AT3	3	ð	5	50265	- 00010	03945	.05530	.05340	59000	
106.	-8,020	04400	09220.	. Series	CE LOS	50019	03240	ChaseD.	.03400	-2,39000	
106.	-5.990	00060*-	1220	03000	19200	01000	029TJ	06660.	.05160	-2.41000	
106.	-3-930	03400	02210.	1866	12810	00000	-,02590	.03290	09670	-2,43000	
× .	-1.895	02300	0.000	CONTR.	01620	goods.	0.01970	.02180	00670	-2.460ED	
106.	2.200	00900	0.000	22.20	G820.	00000	51590	.91470	0.54240	-2.49000	
106.	4.250	0.0000	10710	02170	G1750.	00000	06810*-	.01580	.04419	-2.53220	
106	6.390	Control of the contro	02550	.06860	05220	cocci.	52410	.01850	.24630	20.66.2-	
106.	GEADIENT	.00518	-,00356	86000"-	.0008	10000	.00145	90301	90114	606 31. ·	
		NO.	32/ 5	RENT = 3.99		GRADIENT INTERVAL =	/00'5- =	3.00			
			;	į	ų,	ŧ	2	გ	CABS	ALPMA	
HACH	BETA	8	ð	5	3 2	00019	-,03700	.n5380	.06449	-2.33000	
1.101	-8.080	00690.	05450	0.500		-, 20010	03490	06870	::0e43i	-2.35220	
101.1	-5.995	0.0000	084.0	1000	24160	-,00019	03360	.04549	.06330	-2,38020	
101.1	-3.920	00860-	Control	DL ZU I	.54219	00000	03230	.04140	.06060	-2.40000	
1.101	1.800	- DC+000	1000	01767.	.04040	00000	52730	03100	.55660	-2.44**	
101.1	2.250	Control -	09020	03470	00900	COCKE.	-,52520	.02590	.05560	-2.48.25	
101.1	4.310	ourse.	C9620*-	.09350	.03700	00000	02710	.02500	.05650	-2.52.5	
101.1	0.44.0	Destable	03749	09190	.03320	CHOOSE.	-,03390	.03040	1388U.	-2.36.5	
M972 * E	CEACIENT	96500	-,05.422	-,081226	09034	TORKET.	.00106	-,59245			

1A9 C2A + \$3 + T9 SRM BOUSTER

(11 MAT (RBM1 98)

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	56. 56.	_
4	GBINC :	A.P.A2.22000 -2.24000 -2.34000 -2.34000 -2.34000 -2.34000 -2.34000 -2.40000 -2.40000
PARAMETRIC BATA	22.000 GR	0.000 0.00000 0.000000
PARA	9	7. CT
	ALPHA EUDDET FUDEL	-5.00/ CrN 04160 03690 03690 03690 02680 02760 03099
		CBL00010
		GAACIENT 1 CAF .54330 .04270 .04270 .04140 .03860 .03990 .03730 .03420
		CA 3.000 CA 10090 CA 10090 CA 10090 CA 10090 CA 10090 CA 10090 CA 10090 CA 10090
	28.5309 IN. 7.2992 IV. 1.0000	42, 0 RW1 CLM .03980 .02980 .90710 -,00980 -,01980 -,03700 -,03700
<	2046 1447 2 2 4342	FUN NO. ON
REFERENCE BATA	2.4215 58.FT. 39.8490 IN. 39.8495 IN.	9ETA -8.030 -6.010 -3.990 -1.890 2.220 4.270 6.340 8.410
T	5.45 = 2.45 1,427 = 39.49 1,427 = 39.49 1,438 = 30.49	MACH 1.248 1.248 1.248 1.248 1.248 1.248

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TABLEATED SCHECE FORCE DATA-1A9A

. 87 7		006°	
(ABMIRT) (11 MAY 73	: Eata	OGBINC = ELEVON =	
CREBAT	PARANETRIC BATA	966.	
		ALPHA = RUDER = RUDELR =	GRADIENT INTERVAL = -5.00/ 5.00
A-ES 11-707 1A9 ORA + SS + T9 SAN BOOSTER			INTERVAL =
S + 13 S			GRADIEM
9 OEA •			3.97
11-707 LA		28,5300 IN. 7,2900 IN.	RUN NO. 13/ D RIV. = 3.97
A.E.S			13/ 9
		11 JH42	ģ
		2367 7367 7367	Ş
	ATA PATA	2,4215 90.FT. 39,6495 IN. 39,6495 IN.	
		" in in	

SONE =

ALPNA -, 19000 -, 19000 -, 60000 -, 61000 -, 62000 -, 64000 -, 64000 -, 64000	
CABS .04780 .04770 .04890 .04890 .04890 .04290 .04290 .04290	
C4 .08189 .08480 .08480 .03480 .01189 .01180 .01180 .00800 .00800	9.00
CYN -,03390 -,02310 -,02310 -,01360 -,01360 -,01360 -,01360 -,01360 -,01360	-5.99/
9.00000 .000000 .000000 .000000 .000000 .000000	INTERVAL =
CAF .01639 .01639 .01519 .01519 .01519 .01509 .01509 .00960	GRACIENT
CA .06410 .06360 .06360 .06120 .06320 .05730 .05770 .05720	BUL = 4.49
.01990 .00990 .00956 .00356 00180 01160 01490 11490 11490	6 /62
00 - 0.0500 - 0.0500 - 0.0500 - 0.0500 - 0.0500 - 0.0500 - 0.0500 - 0.0500	RUN NO.
6.160 6.139 6.039 6.199 7.090 7.090 6.160 6.160 6.160 6.160	
460 491 491 491 491 491 491 491	

ALPIA -, 59000 -, 61000 -, 61000 -, 62000 -, 62000 -, 62000 -, 62000 -, 62000 -, 62000 -, 62000 -, 62000 -, 62000	
CABS .05340 .05150 .04380 .04530 .04530 .04530 .04530	
CY .05490 .04920 .04430 .03270 .03270 .01630 .01510 .01910	5.00
CCN -,03950 -,03560 -,03580 -,02920 -,02930 -,02100 -,01750 -,02320	-5.06/
20000000000000000000000000000000000000	INTERVAL =
CAF .02840 .02840 .02880 .02880 .02890 .02890 .02890 .02890 .02890	GRADIENT
	FN/L = 3.99
0.00 0.022.0 0.022.0 0.020.0 0.000.0 0.000.0 0.000.0 0.000.0 0.000.0 0.000.0 0.000.0 0.000.0 0.000.0	33/ 🗓 - 1
00.000.000.000.000.000.000.000.000.000	RUN NO.
BETA -6.010 -5.980 -3.940 -1.690 -1.690 4.240 6.310 6.310 6.430	
2006. 0009. 0009. 0009. 0009. 0009. 0009.	

A.P.A \$56000 - \$56000 - \$5000 - \$5000 - \$5000 - \$5000 - \$5000 - \$5000 - \$5000 - \$5000 - \$5000 - \$5000
CABS .06440 .06360 .06360 .09740 .05740 .05790 .06730
CY .06020 .05420 .05420 .05460 .02460 .72430 .03027
CYN -, 94230 -, 03940 -, 03940 -, 03550 -, 02670 -, 03410 -, 03154
CAF .04260 .04340 .04350 .04167 .03760 .03760 .03760
.19700 .10700 .10500 .10500 .10420 .109840 .109720 .109400
CLM .02839 .01250 .00900 .00050 01450 02110 02830
0.00000
-8.040 -9.960 -9.900 -1.640 2.250 4.330 6.430
2001.1 2001.1 2011.1 2011.1 2011.1 2011.1

The second second second

TABLEATED SOURCE FORCE DATA-1A9A

(EBMOT) (11 MAY 75)	Paranetric Cata	O CERNC = .500		CABS ALPHA .0371019700 .0361019700 .0362024700 .0352024700 .0352024700 .0352024700 .0352024700 .0352024700 .0352024700 .035204
Ø₹ 0	PARAMET	ALPAA = .000 GUDDR = .000 RUDPLR = .000	-5,00/ 5.00	CYN CY -,04390 ,05390 -,04120 ,05760 -,03150 ,03760 -,03150 ,03200 -,03290 ,03200 -,03290 ,03200 -,03290 ,02770 -,04200 ,06190 -,03390 ,05620 -,03390 ,05620 -,03410 ,06390 -,03410 ,06390
TABULATED SOURCE FORCE DATA-149A ANES 11-707 1A9 ORA + S3 + T9 SRM ROJOTER		28,3973 IN. 7,2903 IN. .004: IN.	43/ 9 RNL = 3.90 GRADIENT INTERVAL =	QM CA CA CBL .03170 .10200 .54490 00010 .02170 .10200 .54490 00010 .01210 .19880 .54425 .00000 .01220 .09880 .04340 .00000 .01220 .09800 .04170 .00000 01620 .09200 .04170 .00000 02659 .04870 .03900 .00000 03410 .08790 .03600 .00000 0310 00086 00028 00000 04000 06820 00000 00000 04000 08400 00000 00000 06000 08400 00000 00000 00000 08400 00000 00000 00000 08400 00000 00000 00000 08400 00000 00000 00000 00000 00000 00000
CATE 28 SEP 73 TABULATED	REFERENCE BATA	SAEV = 2.4219 SQ.FT. 1998P = 1.4219 SQ.FT. 1998P = 1.4219 SQ.FT. 1998F = 1.4219 SCALE = 1.0300 SCALE	RUN NO.	1.249 -6.035 -0.0350 1.249 -6.035 -0.0350 1.249 -5.97003500 1.249 -1.67003500 1.249 -2.220 .03500 1.249 6.340 .03400 1.249 6.340 .03400 1.249 6.340 .03476 1.395 -6.03004000 1.395 -2.99004000 1.395 -3.94003500 1.395 -3.94003500 1.395 -3.94003500 1.395 -3.94003500

FASE 73

***	(1621126) (11 MAY 75)	Paractric Cata	2,000 odd)w = 350 ,000 odf,000 = 300 ,000		A CARS ALPHA DASON DASON 1,72000 CONTO DASON 1,72000 CONTO DASON 1,72000 CONTO DASON 1,72000 CONTO DASON 1,72000 CONTO DASON 1,72000 CONTO DASON 1,62000
			ALPHA = RECORDER = RECORDER =	3.30	
	RN BOOSTER			GRADIENT INTERVAL = -5.00/ 5.00	26. Cre 20000. 200000. 2000000. 2000000. 200000. 200000. 200000. 200000. 200000. 200000. 2000000. 2000000. 200000. 200000. 200000. 2000000. 2000000. 200000. 2000000. 2000000. 2000000. 2000000. 2000000. 2000000. 2000000. 20000000. 2000000. 2000000. 2000000. 2000000. 2000000. 2000000. 200000000
•	. 85 + 79 5				CAF .01519 .01756 .01756 .01759 .01599 .01599 .01599 .0170
TABLEATED SOURCE FORCE DATA-1894	AMES 11-707 TA9 CEA + SS + T9 SRM BOOSTER		žžž	RUL = 3.99	CA 206419 206200 206200 206419 206419 205400 205400 205700 205700 205000
SOURCE FOR	ADES 11.		28,5300 IN. 7,2906 IN.	147 0	0.000 - 0.000
TABLEATER		ATA	2867 2867 27867	FUN NO.	00.000. 00.000. 00.000. 00.000. 00.000. 00.000. 00.000. 00.000. 00.000.
r t		SPERENCE CATA	2,4210 99,67. 39,8490 IN. 39,8490 IN.		999 -9.010 999 -9.010 999 -3.990 999 -1.960 999 2.090 999 2.090 999 6.150 999 6.150 999 6.150
DATE 28 SEP 73			SHEF = CFEF = SCALE = SCALE		•

1, 75.00 1, 75.00 1, 65.00 1, 65.00 1, 65.00 1, 65.00 1, 65.00 1, 65.00	61817"- GEO.89"1 GEO.89"1 GEO.89"1 GEO.89"1 GEO.89"1 GEO.89"1 GEO.89"1
688 19196 19980 19880 19880 19880 19880 19880 19880 19880	880 850 850 860 860 860 860 860 860 860 860 860 86
0360 0360 0360 0360 0360 0360 0360 0360	2018 108890 10880 10880 10880 108800 108800 108800 108800 108800 108800 108800 108800 108
CTN -,04119 -,04119 -,04119 -,04119 -,04119 -,01730 -,01730 -,01730 -,01730	CON CON
	C
0.6 0.0000 0.0000 0.0000 0.0280 0.0280 0.0280 0.0280 0.0280 0.0280 0.0280 0.0280	CAE
0.000	CA 1.0660 1.0050 1.0050 1.0050 1.0050 1.0050 1.0050 1.0050 1.0050 1.0050
00000000000000000000000000000000000000	24/ 0 / 45 / 45 / 45 / 45 / 45 / 45 / 45
00 00713 007130 00600 007120 001220 001220 001102	CN NO. CN NO. CN NO. CO STATE OF THE CO STA
967A -6.200 -5.970 -1.690 2.190 6.310 6.310 GRAZIENT	927A -7.990 -5.990 -1.980 -7.980 6.420 6.420 8.540 8.540
• 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

24. 0 RWL = 4.50 GRADIENT INTERVAL = -5.00/ 5.05

RUN NO.

(E) 38 3

12
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g: 3 gid
4

SCALE .

	2000 2000 2000 2000 2000 2000 2000 200
	0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000
	7. 0.0000. 0.0000. 0.0000. 0.0000. 0.0000. 0.0000. 0.0000.
	0.000 - 0.000
	0.6586 .04876 .04476 .04480 .04120 .03399 .03650 .03650
FEV. = 3.33	10250 10250 10250 10360 10360 10360 10310 10310 10310
24/2	00000000000000000000000000000000000000
HUN NO.	0.000000000000000000000000000000000000
	2.230 4.270 2.230 4.270 6.340 6.340
	2 4 6 2 4 6 2 4 6 2 4 6 2 4 6 3 4 6 4 7 7 8 6 5 4 8 5 4 8 5 4 8 5 4 8 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

ANES 11-707 1A9 ORA + 53 + 79 SRM BOOSTER

" by												
								;	•		T JALLEON	006
	6.421	P. 4210 90.FT.	H ASSOCI	.NI 0085.85	IN.			A PAR)			000
	Pa 6490 TV	, z	* AMS	7.2900 IN.	IN.			3	KUCCK =		•	,
	25.000.00		duk	.NI 0000.	IN.				RUDFLR =	3		
	99.66	caso the										
SCALE =	nen.								•			
			RUN NO.	15/ O R	RIVL = 3.96		GRADIENT IMTERVAL =	-9.00/	8.8			
					į	44	Ē	ξ	5	CABS		ALPIN
NO.		DETA	3	5	5	3			02720	02720		3,64000
-	•	-6.020	00216	-,09760	0609G.	.01660	0000	00000	04030	09780		3.63000
. •		-6.015	00610	01090	.06360	00910	2000	20000	0250	094760		3,63000
• •		-3.900	20160.	-,01330	.06230	.01470	anc.		23000	DART		3.62000
, -		076.1-	00610	01490	06130	.01460	.0000	0.010		CARRO		3,62000
• •		GEO	00120	01640	06090	.01370	00000	01430	6130	5555		0.60000
• `		8	Out-ou	01730	00090	.01370	00000	01010	O'sto.			
•			Caraci	01720	00000	.01340	00000	-,00560	.00760	CONC		. 2000
•			10000	CE 040 -	02650.	.01240	00000	00370	01500.	0000		
•	86.	6.130	00130	Carren -	CRYPE	01110.	00000	-,00600	00400	.04670		
•		6.190 coantent	.00025	06000	- (1978)	00017	00000	50200	00322	00013		96030
			RUN NO.	25/ U R	RNL = 4.49		GRADIENT INTERVAL =	-5.007	3.00			
					;	ų	ŧ	2	ູຽ	CABS		ALPHA
£	1 04	BETA	3	ð	5	3		- USARD	.05270	06890		3,70000
•		-6.000	00800	-,00590	. Del 30	COOK!		- 03310	.04430	.05120		3.69000
•		-9.960	00810	01020	08080	00000	00000	12740	03590	06870.		3,67000
•		-3.94D	00010	01460	06640	caree.	00000	0020	8	05040		3.65000
•		016.1-	00020	01750	.07830	06/20	00000	0.110	01160	GE69G.	_	3,76000
•		2.150	00920	022TO	06440.	(1002)	00000	- 00740	00560	.04880		3.76000
•		3.200	00920*	02360	07830	C7620.	COOCO.	- 17987	.00650	015615	•	3,73000
•		6.280	00750.	02540	08770	136363	COCCO	04840	.01160	05350	•	3.69000
•		9.390	.03150	03030	.57650	36621.	20000	67600	00377	-,00006		.01425
		GRADIENT	.00100	00114	00018	0.013	*******					
			RUN NO.	35/ 0	RNL = 4.00		GRADIENT INTERVAL =	-9.007	3.00			
				:	į	9	ē	Š	Շ	CABS		ALPHA
1	HON	BETA	3	ğ	5	3		04320	.05660	.06230		3,65000
÷	1,103	-7.985	00000	00200	orear.	00280		03830	. D488D	.06245		3.82000
+	1.103	-5.940	00800	00420	necar.	1354G	00000	COLEN -	.04139	07090		3,80000
-	1.103	-3.890	.01200	0.00970	15420	04360	00000	0.000	03420	05930		3,77000
•	1,103	-1.850	00910	01350	.10249	.04310	COCCA)*	Carren .	G7610	.06360		3,71000
· •		2.290	.02100	02010	.10480	.04110		20030	040	05250		3.70000
	501	6.330	.02300	72190	10300	06020	00000	G1226*-	OF CACO			3,67909
•		6.420	02450	02380	GG86G*	02720.	00000	C/#211-	2000			3,63000
· ·			00620	-,03030	01760.	טינני.	00000	02710	2000			- 01265
ř						1	-					

TABULATED SOURCE FORCE DATA-149A

AMES 11-707 149 ORA + 53 + 19 SEN BOOSTER

(RBM199) (11 MAT 73)

	8 8		
PARAMETRIC BATA	CERCN =		CABS ALPHA .03610 3,99000 .05530 3,99000 .05400 3,69000 .05400 3,69000 .05400 3,69000 .05400 3,74000 .05400 3,74000
AMETRI	900.		
PAR	ALPHA = RUDSER = RUDFLR =	3.00	03990 .09910 .09130 .09620 .02430 .02430 .02430
	455	-5.00/	CYN -,04450 -,04010 -,02050 -,02490 -,02560 -,02350 -,023740
		CRADIENT INTERVAL =	
			0.04690 0.04480 0.04320 0.04320 0.03890 0.03830 0.04320
	żżż	RN. = 3.00	CA .10210 .10020 .09430 .09530 .09530 .09130 .09130
	28.5300 IN. 7.2900 IN.	45/ O R	QLM 401910, 401910, 401900, 401900, 401901, 401901, 40170, 401901,
2	H H H H H H H H H H H H H H H H H H H	RUN NO.	ON 00300 01400 01400 00320 00320 00320
GEFERENCE CATA	2,4210 59.FT. 39.6490 IN. 39.8490 IN.		9ETA -7.990 -5.940 -1.660 2.223 4.270 6.340 6.410
	25 : 25 : 25 : 25 : 25 : 25 : 25 : 25 :		MACH 1.246 1.246 1.246 1.246 1.246 1.246

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(RBM1D) (11 MAY 79)	
AMES 11-PD7 1A9 CRA + S3 + T9 SRM BOOSTER	

REFERENCE CATA						•	* ***	6.000	ORBINE *	90
	E design	28,5300 IN.	IN.			₹ ₹	٠	66	ELEVON =	900.
	THEE I	7.2900 IN.	. IX			2		000		
	= d)842	.NI 0000.	z.							
SANS COEC.					٠					
	GN ND	16/ 0	and = 3.96	GRADIEM	GRADIENT INTERVAL =	/00*5- :	8 .00			
			;		Ē	3	ដ	CABS		ALPHA
	5	ē	5			-,02590	03950	ş		9,61990
-6.910	00100	51750		06610.		-,02060	.03250	Š	.0arac.	3,61900
610.9-	.03499	- 05000		2000	00000	03420	.02300	ġ	.04745 5.8	5.61000
-4,900	.03400	02070		2000		07010	01870.	Ş.	.04740 5.8	5,61925
-1.990	00680		20140			-,00570	06010.	ç		5.61920
8	00620.	-,01880		0000		00000	00230		.04719 5.8	3.80000
2,030	32600	01760		00010	2000	00000	06500		7.6 08740.	5,79000
4.080	32300	01690		orero.	20000	0.900	-,00880			5.78000
6.115	00020	01530		.01140	2000	5	Cesco.			5,75000
8.170	00020	01770 -	02000	02000	00000	.00237	00367	100001-	•	-,00248
	2	26/36	RW. = 4.49		GRADIENT INTERVAL =	-5.00/	9.00			
					į	ŧ	5	CABS		ALPHA
	3	ş	5	ჭ	텅			2	ç	5,82000
8	COCK	-,01650	OBCRC*	.02880	00000	-,0320				4. 79.PE
	002.50	GOCCO.		.02830	00000	02500				20000
3 9	Day 80	06120		02750.	00000	01840	06610.			
2 5	00000	06820		.02810	cocco.	01260	0110		•	28000
2 1	Contract of	10000		02820	accon.	00370				
2.130	00000	02720		08920	OLYCKIO.	-,00040	•			20000
R 1	20100	12860		.02540	00000	06200*-	00270			a comm
6.20	College.	19060		09020	00000	00820	07100			0.000
e.370 CRACIENT	98000-	02727	•	20006	00000	12200	00800°-		60,7,7,1	60 70
	RUN NO.	36/ 5	RUL = 4.00		GRACIENT INTERVAL =	-5.00/	9.00			
		;	;	940	€	Š	გ	3		ALPHA
<	5	ð		3		03660	04590		.06230 5.1	5.79:000
-7.980	004501	-,01230		CECTO.		03040			.06240 5.1	5.72000
ş	.02600	01500		06291.	20000	- 02800			.06190	3.71000
-3.920	00820	-,01830		. 04280	Constant of the Constant of th	04000			06060	5,70000
-1.e.	00620*	-,02040		04170	00000	03610-				5.77000
	00620	02290	01801. 0	08070	00000	0160				5,73000
9	Care Co	C\$220"-	01501. 0	06860.	00000	-,01230				73000
	20130	0.00		02960	GGGGG.	01550				
C B B	126.10	36.50		03310	00000	-,01790	.00940		••	0.07.000
480	00000	00000-		199.42	00000	.00159	00267		. 65000	00000
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(RBM110) (11 MAT 75)

TABULATED SCIRCE FORCE CATA-! ASA

AMES 11-707 TAS CRA + 53 + 79 SRM BOOFTEN

PARANETRIC CATA

GEFERENCE DATA

6.6		
es di		ALPHA 5.64000 5.64000 5.64000 5.74000 5.74000 5.74000 5.74000 5.74000
OGBINC ELEVON		CABS .03690 .03690 .03560 .03490 .03180 .03610 .03500 .03790
000. 000. 000.		
ALPHA = RUDGER = RUDFLR =	2,30	CY .0.4520 .0.3210 .0.2210 .0.2310 .0.2310 .0.910 .0.910 .0.9169
45 5	-5.00/	CYN -, D3730 -, D3730 -, D2280 -, D2280 -, D2280 -, D2280 -, D2280 -, D2800 -, D1680
	GRADIENT INTERVAL =	CBL
	GRADIENT	CAF .0.4550 .0.4350 .0.4320 .0.4340 .0.3960 .0.3790 .0.3660
żżż	RN/L = 3.01	CA .10210 .09990 .09780 .09510 .09470 .09410 .09410
28.5300 IN. 7.2900 IN.	46/ O R	-, m339 -, m680 -, 01139 -, 01460 -, 01920 -, 02470 -, 03120 -, 03120
# 4342 # 4342	RUN NO.	00020° 00060° 00060° 00020° 00
2.4210 59.FT. 39.6490 IN. 39.6490 IN. 5300 SCALE		BETA -7.970 -5.920 -3.910 -1.690 2.220 4.270 6.310 GAADIENT
SKE = 29.0 .eg = 39.0 .eg = 73.0 .eg = 73.0 .eg = 73.0 .eg = 73.0		1.246 1.246 1.246 1.246 1.246 1.246

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CATE 20 SEF 73		TABULATED	SOURCE FORCE	TABLLATED SOURCE FORCE SATA-1A9A							
			AMES 11-7	AMES 11-707 149 ORA + \$3 + 19 SRM BOOSTER	St + 13 st	M BOOSTER			(RBM11) ((21 MAY 75)	
Ì		\$						PARA	PARAMETRIC CATA		
iř	מבאמער כי	<u> </u>						•	A. nyn CRBINE		
2.4	2.42:5 59.77.	XARIF II	26.5305 IN.	ż				ı #			
ţ1	39,6495 IN.	YMARE	7.2900 IN.	ż			RICOLA	ı (tı			
± 39	39.6495 IN.	E district	.0000 IN.	ż				i			
#1 4-1	SECO SCALE										
		FUN NO.	17/ 5 80	RN/L = 4.90		GRADIENT INTERVAL =	-9.90/	8.8			
			;	8	S	현	£	Շ	CABS	ALPHA	
104	DETA	3	5	5	Care to	00000	91560	07520.	.04749	7.63000	
. 39	-6.019	00000		1000	.01540	00000	DD84D	01370	.94750	7,63000	
666.	-6.019	022260	-,021120	06290	.01519	00000	00160	.00450	.04740	7.840.20	
66.	-4.925	20000		01190	.01319	00000	01100	-,00400	00000	7.6925	
666 .	(2).2-	000	00610	06190	.01400	00000	.00680	-,00830	2000	* 43000	
665	300	CORCU.	0610	0.09070	.01250	00000	02210	02/10-	0.000	4 43000	
66°	2,030	Linker.	-,01370	00190	.01190	00000	.01460	06020*-	04030	7 82000	
6 .			01250	02090	06610.	00000	.01760	06920	06640		
6 .		02.10	01160	.05920	.01080	00000	.01890	09620	Caronic.	7. 78720	
966.			-,01250	.05740	07700.	00000	.01630	02770	07640	- 07.542	
	CRADIENT	-,00349	20174	-,90021	50046	00000	.00229	0000	CANA.		
		SUN NO.	27/ D R	RNL = 4.50		GRADIENT INTERVAL =	-5.99/	5.00			
		!	;	į	9	ē	Š	Շ	CABS	ALPHA	
NAC.	BETA	3	ð	5	200		-,02020	09610.	.05140	7,74000	
006.	-7.980	00060	-,02649	0.020	Series Magazi	CCCCC	00210	06900	.03260	7,73000	
006	-5.950	00060.		20000	Contract of the contract of th	00000	00759	02500	00250.	7,72000	
006	-3,990	00060	crosc	010/0	Consti	COCCO.	00220	00260	06153	7,65000	
006.	£.1970	00000	0.620	02670	0.5620	COCCC.	06700.	01770	.05230	7,77000	
006	2.110	00000	01/201-	00440	וונייייי	acace.	01040	02240	.05260	7,75000	
006	4.183	COXEC	-,02560	0840	02020	00000	02700.	,01960	.05569	7,71000	
	6.230	0.0000	C146811 -	01470	ntega.	acaco.	.00219	01530	.05360	7.6715.0	
٠٠٠٠ نام	GRACIENT	00167	05020	10000	00006	00000	.00223	20344		1000	
		2	37/ D	RNA = 4.50		GRASIENT INTERVAL =	-5.00/	9.00			
		•				!	į	2	CABS	ALFHA	
2	BETA	8	ğ	٥	z	1	200	Carre	06310	7,76000	
	17.97	COTAC.	02460	.19380	.04070	2700.00	0020	(Deer)	06850	7, 79000	
601.1	666.5-	00000	-,02720	.10390	02020	00000	GC120	OCCUPATION OF THE PROPERTY OF	36890	7.79:200	
	G€6, €-	00720.	-,92759	10330	00070	Of the office.	GZ#IG*-	Tanger -		7.77000	
• •	006.1-	30690	52773	.10300	0398D.	01000	139/13/3*=	00000	0.06649	7,74000	
601.1	2.197	00360	02680	.10410	07780.	01000.	Grade-	01499	09290	7,72000	
1.193	4.260	03350	02559	.19499	03960	01000	00000	-,01439		7, 75000	
1.193	6.380	.03200	02590	.10020	.03260	01030	- 00680	03600 -		7,65000	
1.103	6.480	DOMEO.	-,02980	G6860°	GAGEG.	12232	1000	00292		-, 50,831	
	GRADIENT	51013.47	72000	.00012	590X00°-	16444	*****				

TABULATED SOURCE FORCE DATA-1ABA

ANES 11-707 1A9 ORA + S3 + T9 SRM BOOKIER

PARANETRIC BATA

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	906. 900.		± 25 00 00 00 00 00 00 00 00 00 00 00 00 00
	ORBINC = ELEVON ::		M.P44 F60 7.78000 F00 7.78000 590 7.79000 790 7.79000 790 7.74000 710 7.71000 780 7.66000 680 7.61000
	000.		CABS .05760 .05700 .05590 .05790 .05710 .05780
Ž	ALPHA = RUDDER = RUDPER =	3.30	CY .03030 .02110 .01210 .00510 .00120 .00120 .00120
	ABB	-5.00/	CYN -, 02920 -, 102360 -, 101360 -, 101260 -, 101260 -, 101360 -, 101360 -, 101360
		GRADIENT INTERVAL =	CBL -, 2000 -,
			CAF .04520 .04520 .04230 .04230 .04300 .03810 .03810 .03810
	z z ż	FIN. = 3.01	CA .10280 .10080 .09870 .09870 .09870 .09470
	28.5390 IN. 7.2905 IN.	47/ U R	0.04 - 0.0100 - 0.01000 - 0.01000 - 0.01500 -
7	a dynz a dynz	RUN NO.	00 bot of the control
REFERENCE DATA	2,4210 58,FT. 39,8490 IN. 39,8490 IN. .0300 SCALE		# BETA 45 -7.940 45 -5.910 45 -1.695 45 2.290 45 4.289 46 6.340 68 6.340
	SROF = LAEF = BREF = SCALE =		MACH 1.245 1.245 1.245 1.245 1.245 1.245 1.245

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(11 MAY 73				ALPHA -e, 59000 -e, 57000 -e, 62000 -e, 62000 -e, 62000 -e, 62000 -c, 01048		ALP4A -6.59000 -6.59000 -6.59000 -6.63000
(KBM112)	PARAVETRIC BATA	.000 OGBING = .000 D.EVON = .000		CABS .06990 .06690 .05800 .05800 .05700		CABS .96120 .06020 .05460 .95360 .95139
E	PARA	9 T	3.30	CY 00500 0250: 03720 03630 03670: 00103:	5.00	CY 01290 02660 03970 03430 03449
		ALPHA RUDDER RUDDER	-5.00/	CYN 01140 .00000 .00360 .00370 00780		CYN00560 .00390 .007000050000330
IN BOOSTER			GRADIENT INTERVAL =	.00000 .00000 .00000 .00000 .00000	GRADIENT INTERVAL = -5.00/	.00000 .00000 .00000 .00000 .00000
2 et + 22 ·				CAF ,03000 ,02690 ,02690 ,02760 -,00002		CAF .03410 .03610 .02870 .02670 .02670
AMES 11-707 1A9 CRA + 53 + T9 SRM BOOSTER			FBVA. = 3.39	CA .10090 .03690 .03670 .06490 .06480	RN.1 = 2.99	CA .09920 .09030 .08430 .07790 00075
AMES 11-70		28,5399 IN. 7,2979 IN.	97/ D RN	.03980 .03460 .00490 02290 04840	102/ D RN	400 0400 09760 09000 09000 09000 09000 09000
	*	2000 F	RUN NO.	CN 14200 09600 05100 00700 .01095	FUN NO.	00 -1.1990 -1.1990 -1.1990 -1.1990 -1.1110
	OFFERNCE DATA	2.4219 59.FT. 39.8499 IN. 39.8499 IN.		9ETA -7.990 -3.690 -2.09 4.420 6.640		BETA -7.970 -3.910 .190 4.330 6.510 GRADIDAT
		Sed = 2000 Sed = 1000		1.103 1.103 1.103 1.103 1.103		1.250 1.250 1.250 1.250 1.250 1.250

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A COLOR MANAGEMENT AND A COLOR MANAGEMENT AND A COLOR

(11 MT 73)

		5 5				
		000°		4,5900 -6,5900 -6,6900 -6,6900 -6,7900 -6,7900 -0,1932		4LP44 -6.57000 -6.51000 -6.65000 -6.65000 -6.73000 -7.09972
	PARAMETRIC CATA	O CESTING II		CABS .07272 .06847 .06290 .03629 .03629		CABS .06010 .05390 .05390 .05200 .09060
Š	PARANET		5.93	CY .01100 .00350 00340 00130 .00130	5.00	CY ,01220 ,00290 -,00900 -,00900 -,00144
		ALPHA RUDGER RUDFLR	-5.00/ 5	CYN -,01790 -,01460 -,01110 -,02120 ,02045		CYN 01710 01160 00790 01500
M BOXSTEK			GRADIENT INTERVAL =	CBL 00010 00010 00010 00010	GRACIENT INTERVAL = -5.00/	OBL .00000 .00000 .00000 .00000 .00000
8 e · 3			GRADIFAT	.03280 .03280 .03370 .03360 .02940	GRACIENT	CAF .03770 .03250 .0340 .02990 .02990
AMES 11-707 1A9 OPA + SS + T9 SKM BULGICK		ż ż ż	RN7 = 3.99	CA .10320 .10120 .09670 .09700 .06740 0136	FINT = 3.02	CA .09780 .09270 .08630 .08630 .08070
AMES 11-7		28.5305 IN. 7.2905 IN.	118/ 5 RN	.05490 .02970 .00280 02280 04630	111/9 R	05450 .05450 .03230 .02430 04320
	2	2046 = 2748 Z	RUN NO.	00.21 00.90 00.90 00.900. 00.500.	RUN ND.	00 12500 04600 04600 06600 08600
	REFERENCE CATA	2,4210 59.FT. 39,6490 IN. 39,6490 IN.		96TA -7,990 -3,900 -2,960 4,360 6,605 GRAD:ENT		BETA -6,000 -3,930 .170 4,300 6,470 GRADIENT
		SAEF = 2. LAEF = 39. BPEF = 39. SCALE = .		1.102 1.102 1.102 1.102 1.102		1.245 1.245 1.245 1.245 1.245

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### CAN CAN CAN CAN CAN CAN CAN CAN CAN CAN				99.		ר פ	2
### STANKER DATA #### 11-707 1A9 ORA + \$3 + T9 SRN BOOSTER #### TICHNET COLOR	-5.0100.	4.49000	4,5100 -4,53000 -4,58000 -4,48000 -4,66000 -1,0463	н н У Б		(11 MAY 1	3544
### STABLIATED SOURCE FORCE DATA-189A #### STABLIATED SOURCE FORCE DATA-189A #### STABLIATED SOURCE FORCE DATA-189A #### STABLIATED SOURCE PATA ##### # STABLIATED SOURCE PATA ##### STABLIATED SOURCE PATA ##################################	05060.	.09690 .09710 .09390	CABS .068970 .068770 .068970 .056990 .056990	-	JETRIC BATA	(Afbri 14)	
### STATE STATE STATE FORCE CATA-149A GETERINE FATA GETERINE FATA 1.0370 SCALE GIN NO. 96. 7 RAVL = 3.99 GRADIBNT INTERNAL = -5.00/ RIN NO. 104900 .10390 .036400001002630 -3.940 .03600 .03700 .03800 .038000001002630 4.320 .03600 .03700 .03800 .038000001002630 4.320 .03600 .03030 .03820 .038000001002630 6.360 .03700 .03800 .03800 .038000001002630 6.360 .03700 .03800 .03800 .038000001002630 6.360 .03100 .03230 .03800 .031600001002630 6.360 .03100 .03230 .03900 .03160 .00010 .02630 6.360 .03100 .03230 .03600 .03160 .00010 .02630 7.0000 .03230 .03600 .03700 .00010 .02630 7.0000 .03230 .03600 .03700 .00010 .02630 7.0000 .03230 .03600 .03700 .00010 .02630 7.0000 .00000 .00000 .00000 .00000 .00000 .00000 7.00000 .00000 .00000 .00000 .00000 .00000 .00000 7.00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 7.00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 7.00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 7.00000 .000000	02110. 02110.	CY .040310 .02590	C7 .03610 .03200 .02500 .03100 .03100 03168		FARA		
### TABLLATEE SOURCE FORCE CATA-149A ###################################	-,51945 -,52455 -,55046	CYN -,02990 -,02330 -,02430	CTN 02699 02619 02619 02079 02036 02036	AU RU RU -5.00/			
### TABLLATEE SOURCE FORCE CATA-149A ###################################	00000. 00000.		CB000100001000010000100001000010	INTERVAL =		IN BOOSTER	
### CONTRIBUTE BATA ##################################	01750. 09180. -	CAF ,04070 ,03780 ,03530	CAF .03840 .03760 .03760 .03850 .03160 .0000e	GACIEN		S + T S	
### CONTRIBUTE BATA ##################################	0.5990. 0.5900. -	.09490 .09490	ទីសិសិក្សិក	11		797 1A9 OEA +	E CATA-1A9A
6.000 E E E E E E E E E E E E E E E E E E	-,52550 -,54060 -,05541	.04650 .02390	ର୍ଗର୍ବର୍ଷ୍ଥ	888		APES 11-	SOURCE FOR
டி விற்றில் விற்றில் விற்றில் விற்றில் விற்றில் விற்றில் விற்றில் விற்றில் விற்றில் விற்றில் விற்றில் விற்றில்	00920.	59800 56200	ON 095000 060000 026000 031000 031000 031000 031000		1		TABULATED
K Nggʻ	4.275 8.445	6.030 -0.030 -3.940	9674 -9.090 -3.940 .200 4.360 6.360 GRADIENT	.6210 59.FT. .6495 IN. .8495 IN. .0308 SCALE	GPEGENCE EA		
SAEF 7 28 35 7 28 24 24 24 24 24 24 24 24 24 24 24 24 24	1,250	1,250 1,250	1.098 1.098 1.098 1.098	6 H W			CATE BO SEP 73

TABLEATED SOURCE FORCE DATA-IA9A

(4BH115' (11 MAY 79)

ANES 11-777 IAS ORA + SS + T9 SRM BOLLTIN

	985 899				
•	: " NON :: "		2.36000 -2.40000 -2.4000 -2.31000 -2.55000		42.33000 -2.36000 -2.47000 -2.53000 -2.53000
PARAMETRIC BATA	-2,000 GENN -5,000 ELEVON ,000		CABS .D6490 .D6020 .D6020 .D5900 .D5900		CARS .03889 .05889 .05195 .05100 .05100
FARA	* T	5.90	CY .03490 .04500 .03900 .02460 .02870 00244	3.00	7, 13950. 104610. 10350. 102630. 102630.
	ALPIA RUDED RUDEN		CYN0374003390022700252003340	-5.95/	CYN 03990 03410 0360 02670 03130
		GRADIENT INTERVAL = -5.00/	CB000100001000010000100001000010	GRADIENT INTERVAL =	.2000 .2000 .2000 .2000 .2000 .2000
			CAF , 04120 , 04170 , 03990 , 03290 , 03290		CAF .04250 .03800 .03800 .03300
	. X X	RNA = 3.99	CA .10810 .10800 .10800 .09500 .09220	RUL = 3.01	CA .10080 .09680 .09080 .09030 .08480
	28.5320 IN. 7.2905 IN.	117/ D R	CLN .03560 .01570 00180 02190 03780	112/ C R	CLN .0.4030 .0.1960 01630 01630 01464
¥	1 6384Z	SUN NO.	00 07100 04100 01200 01200	RUN NO.	00 07600 04600 04600 04600 04750.
GEFENENCE DATA	2.4215 59.FT. 39.6490 IN. 39.6490 IN.		BETA -0.060 -3.930 -2.930 4.330 GR.0.EM		967A -6.040 -5.940 1.80 4.270 8.429 GRADIENT
	SAT : 2. LKOT : 39. RATE : 39.	•	1,100 1,100 1,100 1,100 1,100 1,100		MACH 1.245 1.245 1.245 1.245

(11 my 73)
(REM 16)
AMES 11-757 1A9 CRA + S3 + T9 SGH BOOSTER

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}	(11 My 73		999.		ALPHA 58000 61000 7000 81000 01456	ALPHA - 54000 - 55000 - 63000 - 69000 - 75000
	(स्टिम्स १६) (१	PARAMETRIC BATA	CRBINC		CABS .06460 .76020 .76020 .03740 .96070	CABS .03790 .03620 .03180 .03110 .05210 .00062
	E	PARAVE	T	8.99	CY .03970 .03790 .02310 .02930 00336	CY .06280 .05390 .0420 .02320 .02020
			ALPNA RUCCER RUCPLR	-5.00/	CAN 04240 038320 03319 034020 00164	CYN -,04330 -,03960 -,12650 -,12630 -,03160
	TH BOOSTER			GRADIENT INTERVAL =	CBL CBL CAL	CB,00010 -,00010 -,00010 -,00010 -,00000
	\$ 67 + 52 +					CAF , 24400 , 04200 , 04020 , 03500 -, 00022
CATA-1A9A	AMES 11-707 1A9 ORA + S3 + T9 SKM BOOSTER		444	FNL = 3.99	CA .10660 .10600 .106140 .09750 .09480 00103	7, 10190 .09800 .09230 .09130 .09130
TABULATED SOURCE FORCE BATA-1A9A	AMES 11-77		.06.5300 IN. 7.2900 IN. .0000 IN.	99/ D FN	00.00 0.00 0.0110.0 0.000 0.000 0.000 0.000 0.000 0.000 0.000	.03320 .03320 .01380 01380 01480
TABULATED !		4 1		FUN NO.		
		GEFERENCE CATA	2.4219 53.FT. 39.e495 IV. 39.8495 IN.		PETA -8.545 -3.915 -2.95 4.335 6.345 GRADIENT	BETA -9.020 -3.920 -1.920 4.270 6.430
CATE 28 SEP 73		u	940 = 2.4 Lege = 39.1 Back = 39.8 SCALE = .7		1,099 1,099 1,099 1,099 1,099	1,247 1,247 1,247 1,247

TABULATED SOURCE FORCE BATA-148A

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	8 H		1,9000 1,9000 1,6000 1,7000 1,7000 1,6000 1,6000	1,97000 1,97000 1,05000 1,72000 1,72000
PAGANETRIC BATA	d degree		CABS .062/0 .05910 .05910 .06220 .06220	CARS .03730 .03130 .03130 .03340 .03340
PARANE	2.920 2.920 3.920 3.920	8	20.25 20.25	7 .05910 .03910 .03620 .02620 .02420
	ALPHA REDEST	-5.00/ 5.00	CYN -, C4390 -, C3890 -, C3290 -, C3290	CAN 04400 03890 03270 03140
		GRACIENT INTERVAL =	AF CBL 64350 -,00016 64250 -,00016 64250 ,00000 63350 ,00000 63350 ,00000 63051 ,00001	
		GEACIENT	CAF .04350 .04420 .04420 .03420 .03320 30034	CAF .04550 .04310 .04080 .03980 .03650
		RIVL = 3.99	CA .10690 .10370 .10140 .10220 .59340 107167	20 20301. 20900. 20900. 20900.
	28.530G IN. 7.290D IN. .000D IN.	IIE/ G RN	0.1739 .01739 .02130 -,02140 -,03149 -,03149	0.02136 .02130. 00700. 01700. 00000.
<	2066 11 4347 2067	A NO.	00 - 12700 - 12800 - 1	00000. 00000. 00000. 00000. 000000.
REPERENCE BATA	2.4215 53.FT. 39.8495 IV. 39.8495 IV. .0356 SCALE		45.4 -6.506 -3.886 .225 4.325 8.335 64.535	2.980 -3.990 -3.990 4.273
ŭ.	245 = 2.45 19.00 = 39.00 20.00 = 39.00 5.00 = 30.00		2011 2011 2011 2011 2011 2011	1.244 1.244 1.244 1.244 1.244

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DATE 28 SEF 73

AMES 11-757 1A9 CRA + S3 + T9 SRM BOCSTER

Constant of

H 8 4500 m PATAMETRIC DATA 86. se ALPHA = FLESSE = FLESSE = <u>و</u> د 28.539C 1%. 7.290G 1%. .200C 1%. A SHEET ZHEZ SEPTEMBER DATA 2,4215 59,FT. 39,6495 IN. 39,8495 IN. 33255 SCALE

> BREF = SCALE = 5 ST CE

8,99200 8,99200 8,99200 8,99200 8,8920 8,8920 8,8920 8,900 8,900 8,000 8,000 8,000 8,000 8,000 8,000 8,000 8,0 1,2000 1, 23.62. 23.62. 23.62. 23.62. 23.63. 26.63. 26.63. 06650 C4 201902. 201902. 201902. 201902. \$ 52.00 6 55.0 Crs -,03600 -,01600 -,01960 -,01750 -,01750 -,01750 RUN NO. 115/ S RIVIL = 3.99 GRADIENT INTERVAL = -5.05/ -5.00 .000. .00000 .00000 .00000 .00000 GRADIENT INTERVAL . 54460 . 54290 . 54180 . 53310 . 53550 .04200 .04140 .04140 .03840 .03240 20 10900 11000 10000 10000 10000 10000 130E ..00470 -.00470 -.01570 -.01910 -.01012 20107---011730 --02180 --02280 --02890 114/ 5 46. NO. ON .01630 .02400 02420 02720 00049 .02720 .02900 .02900 21000 S. Seese 9ETA -7.990 -3.990 -1.49 4.289 6.419 GRADIENT .160 4.305 8.495 GRADIDAT 27.960 -7.960 -3.975 1.246 1.246 1.246 1.246 101.1 1.101

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CATA-1A9
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1	(11 MA 73	2	JEBING = ELEVON =		ALP4A 7, 66000 7, 71000 7, 66000 7, 66000 -, 00654	ALPHA 7,66000 7,77000 7,73000 7,79000 7,71000
	(RBMSED)	PARAMETRIC CATA	000.4 000.8- 000.		CABS .06330 .06330 .06360 .06310 .06740	CABS .05860 .05860 .05860 .05600
		PARA	ALPHA = 6. SUDDER = -5.	3.00		CY .02960 .00940 .00040 00370 00290
			₹ \$ ₹	-5.00/ 5.00	CYN -,02620 -,01400 -,01400 -,01400 -,01400 -,01400 -,01400 -,01400	CYN0287001680010000103001200
	RETROOM NO			CRADIENT INTERVAL =	AF CBL 104060 .02000 104010 .02000 103050 .02000 103160 .02000 103160 .02000 103160 INTERVAL =	CBL .00000 .00000 .00000 .00000
	25 + 73 52			CRADIENT	CAF ,04060 ,04010 ,03600 ,03160 -,00050 GRADIENT	CAF .04430 .04240 .04190 .03800 .03530
TABULATEE SCORIE FORCE CATALITIES	AMES 11-707 1A9 ORA + S3 + 79 SRM BOOSTER		V. V.	FN/L = 3.98	CA .10390 .10360 .10310 .10310 .09900 .00018	CA 10290 .09870 .09770 .09480 .09340
51.3	AMES 11-		28.5300 IN. 7.2900 IN. .0200 IN.	1017 O R	0.00 -	0.00 - 0.
TABOLATE		2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PAN AG.	O. 2000 2000 2000 2000 2000 2000 2000 200	CN .04200 .03900 .03600 .03200 .03400
		REFERENCE CATA	2.4217 50.FT. 39.8490 IN. 39.8490 IN. .0370 SCALE		9ETA -7.950 -3.900 .140 4.290 6.490	9ETA -7,940 -3,900 .140 4,270 68,7 GRADIENT
DATE 28 SEF 73		٠	97EF : 29.		1.099 1.099 1.099 1.099 1.099	. MACH 1,246 1,246 1,246 1,246 1,246

(RBM121) (11 MAY 73)

900 OKBING = PARAMETRIC DATA -8,000 -10,000 ALPHA :: RUDSER :: RUDPLR :: GRADIENT INTERVAL = -5.05/ 5.00 AMES 11-707 149 024 + 53 + 79 SRM 9005779 RN/L = 3.98 26.5399 IN. 7.2900 IN. .9000 IN. n 0 0 YARP YARP REFERENCE DATA 2,4219 30.FT. 39,6490 IN. 39,8490 IN.

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RUN NO.

SHOP IN SCALE IN SCALE

-6.59000 -6.62000 -6.69000 -6.69000 -0.00120 -6.56000 -6.56000 -6.53000 -6.73000 -0.03120 ALPHA -8.62000 ALPHA -6.63000 CABS .06070 .05570 .05440 .05350 .05140 CABS .06620 .06400 .06400 .05790 -.02810 -.04190 -.03840 -.03550 -,03630 -,03640 -,02730 -,00159 دم -.01020 -190**80**0 -.02320 9.00 CYN
-,00560
,00380
,00380
-,00380
-,00380 CTN -.01140 .00030 .00260 -.00770 -5.00/ CB4. -, 202010 -, 202020 -, 202020 -, 202020 -, 202020 .20000 .00000 .00000 .00000 .00000 GRACIENT INTERVAL .03240 .03240 .02940 .03960 .02730 CAF .03480 .03070 .02830 .03070 .02690 RNA = 3.02 .10060 .10060 .09340 .08590 .08590 CA .09560 .09030 .08270 .08420 .07830 ,06010 ,03630 ,03630 ,00550 ,04740 ,04740 -. 02330 -. 04860 -. 05689 Q_N .05880 .03390 .00360 o /9 -.14736 -.15359 -.05599 -.51109 -,14200 -,09700 -,04900 -,00600 RUN NO. .01115 .01096 5 3 .190. 4.330 8.519 GRADIENT 6.640 GRACIENT DETA -7.970 9£TA -7,990 4.415 -3.920 -3.690 273 1.245 1.245 1.245 1.245 1.245

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TABLLATED SOURCE FORCE DATA-1A9A
CATE 28 SEP 73

AMES 11-707 1A9 OEA + S3 + T9 SRM BOOSTER

(RBM122) (11 MAY 79)

!	00 00 00 00				
	" " Y 8		ALP44 -6.47000 -6.48000 -6.52000 -6.59000 -6.690000 -0.013350		ALP4A -6.61000 -6.49000 -6.59000 -6.59000 -0.00971
PARANETRIC DATA	-6.000 ORBINC -10.000 ELEVON		CABS .07090 .06610 .06270 .03620 00131		CABS .06010 .05410 .05400 .05020
PARA	45	2.00	.01770 .01770 .00690 00170 00560 .00170	3.00	CY .01250 .00170 00620 00330 00133
	ALPHA RUDOER RUSFLR	-9.50/	CYN -,02040 -,01470 -,01190 -,02120 ,00046		CYN -,01710 -,01090 -,00870 -,00960 -,01730
		GRADIENT INTERVAL =	CBL -, 202019 -, 202019 -, 202019 -, 202019	GRADIENT INTERVAL = -5.00/	.00000 .00000 .00000 .00000 .00000
		CRADIENT	CAF .03370 .03310 .03420 .03420 .02990	GRACIENT	CAF .03760 .03430 .03420 .03420 .03010
		EWL = 3.99	CA .10420 .10120 .09670 .09880 .08820	RN/L = 3.01	CA .09770 .09230 .08390 .08650 .08030
	28,5300 IN. 7,2900 IN. .0000 IN.	61/ D RN	00.00 .031.00 .02640 .02250 02310 04650	70/ 0 RN	QN .05290 .02820 .00240 02150 04490
REFERENCE DATA	2000 2007 2007 2007	RUN NO.	00. 00.111 00.710 00.500. 00.500.	RUN NO.	00 12100 06000 03900 06100 .03100
	2.4210 53.FT. 39.6490 IN. 39.6490 IN.		9ETA -9.010 -3.910 -2.20 4.360 6.595		BETA -6.010 -3.940 .170 4.300 6.460
ir	SAEF = 2.4 LREF = 39.6 BREF = 39.6 SCALE = .0		1,099 1,099 1,099 1,099 1,099		1,249 1,249 1,249 1,249 1,249

8 8

(RBM123) (11	PARANETRIC DATA	-4,000 ORBINC = -10,000 ELEVON =
	PARA	, 11 11 11
AMES 11-707 1A9 ORA + S3 + T9 SRM BOOSTEN	HETEFORE DATA	2.4210 50.FT. WAFP = 28.5300 IN. RUDGR 39.8490 IN. YHEP = 7.2900 IN. RUDGR 39.8490 IN. ZHEP = .0000 IN. RUDGR

8			
		4,45000 -4,45000 -4,52000 -4,58000 -4,67000 -4,58000	ALPHA -4,45000 -4,57000 -4,57000 -4,64000 -,01218
10.000 ELEVON		CABS .06770 .06800 .06220 .05410 .05900	CABS .05850 .05760 .05760 .05060 .05090
RUDSER = -10.000	9.90	CY .03910 .02730 .01660 .01660 .02240 00163	CY .03920 .02240 .02240 .01250 01930
5	-9.00/	CrN -,02930 -,02620 -,02630 -,02050 -,02040 -,03040	CYN -, 02950 -, 02460 -, 02320 -, 02750 -, 02750
	GRADIENT INTERVAL = -5.00/	AF CBL 0360000010 0360000010 0366000010 0370000010 0310000010 05012 .00000	
	GRADIENT	CAF .03600 .03600 .03700 .03100 90012	CAF .04010 .03760 .03520 .03610 .03250
ž ž ž	RN/L = 3.98	CA .10360 .10360 .09800 .09810 .09110 .0911009131	8 8 8 8 6 6 C
.81 0000.7 .7.2900 IN.	62/0	04490 .04490 .02130 .02120 .04130 .077	000000
11 11 11 11 11 11 11 11 11 11 11 11 11	RUN NO.	00650 00650 00650 00000. 00000.	00 00800 00850 00850. 00500.
.8210 59.FT. .8490 IN. .6490 IN.		6574 -6.060 -3.940 .200 4.320 6.530 GRADIENT	BETA -0.040 -3.940 -100 -4.270 6.420
SACT = 2.421 LRET = 39.845 BREE = 39.845 SKALE = 538		1,099 1,099 1,099 1,099 1,099 1,099	1,246 1,246 1,246 1,246 1,246

TABLEATED SOURCE FORCE DATA-1A9A
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CATE 20 SEF
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OSTER (REM124) (11 MAY 79)

	174	ORBINC = BLEWON =
	PARANETRIC BATA	
	4	ALPHA = -2.500 RIDSER = -10.500 RIDFLR = .000
ANES 11-737 IND CEN 1 SO 1 12 CO.		
AMES 11-707 143		= 28.5500 IN. = 7.2900 IN. = .0000 IN.
	ITA	10 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
	REFERENCE DATA	~ 8 8
		SACT = LATE = BACT = SCALE = SCALE =

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	ALP44 -2.32000 -2.36000 -2.46000 -2.56000		A.P.H2.39000 -2.46000 -2.46000
	CABS .06480 .06320 .09030 .09800 00084		CABS .05610 .05630 .05130 .05130
3.99	05500. 05500. 05000. 05000. 05000. 05000.	9.00	CY .06130 .04690 .02800 .03000
-5.90/	CYN -,03780 -,03190 -,02600 -,03840	-5.90/	CYN -,0440 -,02750 -,03260
GRADIENT INTERVAL =	CBL -,00010 -,00010 -,00010 -,00010	INTERVAL =	
GRACIENT	CAF .04130 .04200 .04200 .03870 .03270	GRADIENT	CAF .04310 .04040 .03890 .03320
RN/L = 3,99	.10610 .10520 .10030 .09500 .09200	RNA = 3.01	03.01. .09570 .09570 .09040 .08490
62/59	.03490 .01430 .01620 .02180 .03860	6 /2	0.057.00. 0.057.00. 0.051.00. 0.051.00.
RUN NO.	00880. - 00880. - 00810. - 00810.	RUN NC.	ON -, OTODO -, DAZO ODDO , DAZO , DAZ
	PETA -0.000 -3.930 .210 4.310 6.530		9ETA -9.040 -3.990 4.260 9.410
	1.101 1.101 1.101 1.101 1.101		1.248 1.248 1.248 1.248

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(11 MAY 73	ATA	OKBINC =		ALPHA 9019000 1025000 9067000 9073000 6045000 7405646
(RBM125)	PARAMETRIC BATA	000.01-		CABS .06319 .06319 .05390 .05700 .06140
	PARA	97		C4 .09800 .09800 .02440 .03070
		RUDDER :	8.90	1
		₹ ₹ ₹	-9.00/	CYN -,04340 -,03420 -,03420 -,03470 -,03470
H BOJSTER			GRADIENT INTERVAL = -5.00/	
S3 + T9 SA				CAF .04160 .04330 .04160 .05040 .05360
AMES 11-707 1A9 02A + S3 + T9 SAN BOJSTER		4 4 4	RN. = 3.99	CA .19720 .19640 .19170 .19740 .99520
AES 11-7		26,5300 IN. 7,2900 IN.	64/ U RN	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
	1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	RUN NO.	00. 04700 02100 04200 04600 04400
	REFERENCE BATA	2,4210 59.FT. 39,8490 IN. 39,8490 IN.		-8.726 -8.726 -3.900 -3.900 4.325 8.335
	¥			1,096 1,096 1,096 1,096 1,098

ALPHA --.66000 --.75000

CABS .05130 .05180

C. .02980 .02940

CYN -,02890 -,03340 .00000

CBL .00000 .00000 .00000

CAF ,03940 ,03540 ,00000

C4 .09070 .08720 .00000

A.M --.01920 --.03500.

ON .03400 .03300

4.270 6.420 6.420

1.248

73/ 0 RAVL = 3.01 GRADIENT INTERVAL = -5.00/ 5.00

RUN NO.

CATE 28 SEP 73	_	TABLANTED	SOURCE FOR	TABLEATED SOURCE FORCE DATA-1A9A						•	; }	
			AMES 11-	AMES 11-707 IA9 ORA + S3 + T9 SEM BOOSTER	S3 + 79 S6	IN BOOSTER			(KBM 26)	(11 MAY 75	A7 73	•
	REFERENCE CATA	ATA						PARA	PARANETRIC DATA	SATA		
SAEF : 29 LAEF : 39 PREF : 39	2,4210 59.FT. 39,8490 IN. 39,8495 IN.	H 1387	28,5300 IN. 7,2905 IN. ,0000 IN.	i i i			255	RUCKER = 2 RUCKER = -10 RUCKER =	2,500 -10,500 -200	GRBINC = ELEVON =	005. 009:	88
		S NO.	65/ G R	RIV. = 3.99		GRADIENT INTERVAL =	-5.99/	5.00				
1.099 1.099 1.099 1.099 1.099	BETA -8.010 -3.690 .220 4.320 6.540	ON -,02600 -,00900 .00900 .00220 .00329 RIN NO.	00710. 00710. 08000. 08250 08200 078500	CA .19710 .19800 .19800 .9800 -,00067	CAF .04319 .0440 .04219 .04039 .03409 00059 GRADIENT	AF GBL 0.441000010 0.4420 .00000 0.4210 .00000 0.9300 .00000 0.0000 .00000 0.0000 .00000	Crit D4620 03900 03300 03300 03300 5.00/	CY .06340 .09500 .09500 .052150 .02750 00347	CABS .06400 .08160 .09820 .06020 .06200		ALP4A .82000 .76000 .77000 .68000 .65000	
1,247 1,247 1,247 1,247 1,247	BETA -0.000 -3.910 .180 4.260 6.430	0.0250 0.0200 0.0200. 0.0210. 0.01803.	0.02170 0.12040 0.1010 0.1010 0.10240 0.2000	20. 10200. 109800. 109800. 109300. 109300.	0AF - 54480 - 54370 - 54140 - 53890 - 53830 - 50147	CB. 00019 .00000 .00000 .00000 .00000	CYN04580038900333002720	C4 .06340 .05910 .03670 .01660 .01660	CABS .05600 .05490 .05000 .05300 .05500	•	ALPHA 1.65000 1.72000 1.66000 1.73000	

CATE 20 SEP 73

TABULATED SOURCE FORCE DATA-1A9A

AMES 11-757 1A9 ORA + S5 + T9 SRM BOOSTER

PARANETRIC DATA

(KBN127) (11 MAY 73)

aas.	900.	
a Deliga	ELEVON =	
	000.01-	
	ALPRA :: RUDFLR ::	-5.90/ 5.90
		RUN NO. 66/ D RN/L = 3,99 GRADIENT INTERVAL = -5,00/ 5,00
		3,99
	28.5300 IN. 7.2300 IN.	86/ D RUL =
2	= d362	RUN ND.
REFERENCE DATA	2 24219 54.FT. X = 39,6490 IN. Y = 39,6490 IN. Z = 130,6490 IN. Z = .0300 SUALE	
	SET : UET : BEET : SCALE ::	

5. 76020 5. 76020 5. 71020 5. 75000 5. 75000 5. 75000
CABS .96319 .06360 .06090 .06290 .06290
C7 .05610 .04270 .02620 .01950 .01950
CYN0441005430023200268002147
.00000 .00000 .00000 .00000 .00000
CAF .04250 .04350 .04220 .03430 .03430
CA .10360 .10410 .10670 .10670 .005700 .005720
ALM
ON .00000. .01400. .02500. .00500.
9ETA -7,980 -3,900 .180 4,320 6,310
1.191 1.191 1.191 1.191

	3.6600 3.6900 3.6900 3.7200 3.6700 01096
	CA88 .05720 .05490 .05220 .05420 .05470
5.00	C7 .03820. .04220. .04230. .02200.
/56*5-	CYN -,04400 -,03490 -,02410 -,02430 -,02800
INTERVAL = -5.00/	CB. -, cotots -, cotots -, cotots -, cotots -, cotots
GRADIENT	0.6520 .04520 .04120 .04120 .03970 .03670
RN/L = 3.01	CA .10250 .09800 .09360 .09370 .09070
75/ 13 R	ALM .00870 .00590
RUN NO.	00 00500. 00510. 00910. 00950. 00900.
	9ETA -7.980 -3.900 -1.60 -4.275 -6.4270
	1.246 1.246 1.246 1.246 1.246

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PAGE	(11 MAY 73		t) ti		5.6220 5.7520 5.7520 5.6220 5.5920 5.6920 02431	ALPHA 5,89000 5,78000 5,8000 5,72000 6,72000
	(FBM26) (PARAVETRIC BATA	.cod Gebine =		CABS .06220 .06230 .06390 .06390 .06390	CABS .05760 .05480 .05350 .05530 .05730
	<u>u</u>	PARAVE		5.30	CT .04530 .02720 .01230 .00700 .00900 50246	.04420 .03542 .03540 .01510 .01640 -00223
			ALPHA RUDEU RUDEU	-5.00/	CYN -,03699 -,02460 -,01500 -,01319 -,01899 ,00149	CYN -,03670 -,02930 -,02060 -,02010 -,02260
	· BOOSTER			GRADIENT INTERVAL =	AF CBL 04289 .00000 04170 .00000 04130 .00000 03870 .00000 00037 .00000 GRAS;EMT INTERVAL =	
	SS + T9 SE			GRACIENT	CAF .04280 .04170 .03870 .03870 .00390 GRASTENT	CAF .04490 .04330 .04230 .03960 .03590 .00348
TABULATED SOURCE FORCE DATA-1A9A	AMES 11-707 IA9 CRA + S3 + T9 SRM BOOSTER		ž ž ž	RN/L = 4.00	CA .10900 .10300 .10300 .09800 00010 -	CA .10250 .09610 .09580 .09280 .09320
SOURCE FOR	AMES 11-1		28,5399 IN. 7,2995 IN.	67/ 5 R	-, 51360 -, 51360 -, 51360 -, 52300 -, 53120 -, 53120 -, 53120 -, 53120	
TABULATEE :		<u>*</u>	= d3942	RUN NO.	ON22703 32703 3220 3220 3320 27724	ON 0.0220. 0.0220. 0.0220. 0.0360.
		REPERBICE CATA	2.4210 59.FT. 39.6490 IN. 39.6490 IN. .0300 SCALE		BETA -7,990 -3,920 -154 4,295 6,489 GRASIENT	9ETA -7.960 -5.910 -3.40 4.275 6.400
CATE 20 SEP 73		ur	SECT = 2.4 URCT = 39.6 BRET = 39.6		1,099 1,099 1,099 1,099 1,099	1.248 1.248 1.248 1.248 1.248

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TABLLATED SCURCE FORCE CATA-1A9A DATE 20 SEP 73

AMES 11-757 IA9 CRA + S3 + T9 SRM BODGITER

(4BM29) (11 4M 73)

	266 266
CATA	OFBINC =
PARANETRIC CATA	6.999 -10.996 -10.99
	ALPHA = FUCKER = FUCKER =
	28,5350 IN. 7,2953 IN. ,0050 IN.
	28.539 7.299
	11 dige.
EATA	
BFFFFFFF CATA	2.4215 59.FT. 39.6495 IN. 39.6495 IN.
	SPEE = SCALE =

	7,62000 7,62000 7,69000 7,71000 7,71000		7, 65000 7, 75000 7, 72000 7, 72000 7, 74000 -, 00657
	CABS .D6430 .D6410 .D6970 .D6970 .D6620		CABS .03640 .03800 .03710 .03710 .03710
5.90	CY .02760 .00720 00640 01290 00790	3.00	73 05000. 05000. 05000. 05000. 05000. 05000. 05000. 05000.
-5.99/	CYN027300139000400019000750	-5.00/	CYN -,02910 -,01790 -,01000 -,01190 -,01090
CRADIENT INTERVAL = -5.00/		INTERVAL =	.00000 .00000 .00000 .00000 .00000
GRACIENT	.03990 .04010 .03930 .03380 .03120	GRADIENT	CAF .04470 .04280 .04120 .03770 .03440
EWL = 3.99	.19420 .19410 .19430 .19530 .9940	RN/L = 3.01	CA .10310 .09860 .09670 .09480 .09337
66/9 EN		77.0 8	
RUN NO.	00 24800 24800 20400 20000 20000 20000	RUN NO.	00 00840. 000840. 000840. 000860.
	BETA -7.960 -3.915 .140 4.270 6.460 GRADIENT		2.946 -7.946 -5.900 140 4.290
	960.1		MOH 1.246 1.246 1.246 1.246

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	•		ខ្ព			
PAGE 97	(11 PMY 73		000°		ALPAA -4.65000 -4.66000 -6.71000 -6.81000 :1200	ALPAA -0. ASTEED -0. SECTED -0. GESTED -0. TSTEED -0. TSTEED
	(EBM 39)	PARAMETRIC CATA	-8.000 OGBINC = -15.000 ELEVON = .000		CABS .07090 .08630 .03690 .03660 00116	CABS .06150 .05960 .05350 .05370 .05130
		Wara		5.00	00490 02310 03100 03600 02640 02162-	CY -, 00960 -, 03090 -, 03990 -, 03770 -, 03770
			ALPNA RUEDER RUEDER	-5.00/		
	TH BOOSTER			GRADIENT INTERVAL =		GEASTENT INTERVAL = -2.004 JA GR. CTN GRASS
	S + T + S			CRACIENT	0	,
E CATA-TA9A	AMES 11-797 IA9 CRA + SS + T9 SAN BOOSTER		żżż	FIV. = 4.03	ដូត្តទូទម្	CA
TART ATER SOURCE FORCE BATA-149A	AMES 11-7		26.5909 IN. 7.2900 IN.	78/ G R	00300 .03420 .03300 .02260 .04770	CAN CATANA CAT
TARES AVER		Ą.	H 4342	RUN NO.	00 -,14200 -,09700 -,09800 -,01800 172800	ON NO. ON1510010400057000120001200
		REFERENCE BATA	2,4215 SJ.FT. 39,8495 IN. 39,8495 IN.		-7.930 -7.930 -3.690 .260 4.429 6.657	BETA -7.980 -3.920 .1.00 4.340 0.510
•	CATE 28 SCF 13	æ	SAET : 2.4 UAET : 39.6 BAET : 39.6		M.O. 1,103 1,103 1,103 1,103 1,103	1,244 1,244 1,244 1,244 1,244

TABULATED SQUECE FORCE DATA-1ASA CATE 28 SEP 73

ANES 11-707 149 CRA + 53 + 79 SKN DOUGTER

CENTURE E 12 MAY 75 3

PERMETRIC BATA

8 8	
GENA:	
# 55.55 26.25 26.25	
ALPHA = RUDDER = RUDPLR =	-5.00/ 5.00
	RUN ND. 79/ 5 RWL = 3,99 GRADIENT INTERVAL = -5,05/ 5,00
	3.99
28.5300 IN. 7.2900 IN.	79/ 3 RWL =
H 43462	RUN ND.
2.4210 59.F7. X 39.6495 1N. Y 39.6495 1N. Z	
SET : URT : SCALE ::	

	4.744 -4.4900 -6.4900 -6.4900 -6.4900 -6.1900 -6.1900		4.800 6.800 4.800 4.800 6.800 6.800
	CARS .06970 .06700 .06700 .05710 .057100 .05100		CARS .98040 .08419 .98260 .98260 .98260
	79 100 100 - 100 100 - 100 100 - 100 100 - 100 100 -	5.90	Cf .01290 .00030 .00030 .00030 .000103 .000103
	CYN -,02090 -,01400 -,01010 -,02070 -,02070	-5.967	CYN -,01710 -,01030 -,01060 -,01660 -,01660
	6. 2.2000. 2.2000. 2.2000. 2.2000. 2.2000. 2.2000.	INTERVAL :	40.0000.00000.00000.00000.00000.00000.0000
	Cof .03449 .03469 .03209 .0220 .02300 00016	GRACIENT	.03750 .03390 .03280 .03280 .03260
	C4 .10400 .19110 .09600 .08990 .08900 00136	RNA. = 2.99	CA .09780. .99240. .9860. .96090. .00900.
•	0.00 0.051.90 0.02500 0.02500 0.04600 0.04600 0.04600	e9/ 5 R	0.04 .09390. .09390. .02390. .04430.
	00 00 00 00 00 00 00 00 00 00 00 00 00	RUN NO.	ON 1.0250 1.0250 1.0200 1.0260.
	4.395 4.395 4.395 6.655 6.665		-6.000 -3.995 .160 4.900 6.480
	1.097 1.097 1.097 1.097 1.097		10 00 52 11 00 52 11 00 52 11 00 52 11 00 52 11

Comment of the state of the sta	Pagavetpic gata	ALPEN = -4,000 OESIM = ,500 RUDER = -15,000 ELEVON = ,700 RUDELR = ,000	17 5.98	CY CASS ALPHA 103475 - GETTO - 4.457070 10 .03195	96'5 /1	CY CARS ALPHA 154160 .03880 -4.47000 10 .02790 .03882 -4.47000 20 .02280 .03382 -4.47000 20 .02280 .03382 -4.59000 20 .01480 .05280 -4.54000 21 .01530 .05182 -4.54000
AMES 11-707 1A9 ORA + S3 + T9 SRM BOOSTER		20,5305 IN. 7,2925 IN. .0050 IN.	RUL = 3.99 GRADIENT INTERVAL = -5.057	CA CNF CBL CYN 1.103601037900001902019 1.10360038190001902819 1.10360038190001902829 1.10360037600000001999 1.10370037600001903919	RIVL = 3.00 GROTENT INTERVAL = -5.007	CA CAF CEL CTN 1.09870 .039800201903079 10 .09830 .03730 .0202002630 20 .08830 .03730 .0202002630 20 .08830 .03780 .0202002630 21 .08230 .03210 .0202002580
; S34	ADESTONE DATA	52.FT. 2067 :: IN. 1965 :: IN. 2069 :: SCALE	RUN NO. 80./ 5	1.107 -0.04 1.107 -0.040 -0.0900 0.04400 1.107 -0.0900 -0.09000 1.107 -0.0900 -0.09000 1.107 -0.0900 -0.09000 1.107 -0.0900 -0.09000 1.107 -0.0900 -0.09000	RUN ND. 98/ 5	1,249 -0.040 -1.0000 0.04829 1,249 -3,99905279 0.02479 1,249 .17702800 0.00180 1,249 4,280 0.0010002000 1,249 6,439 0.0010002007

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CHEMISSON OF THE WAY 375 IN

TABLAATED SOURCE FORCE DATA-1A9A

AMES 11-757 1A9 OZA + SI + T9 SEM BOUSTER

	B B				
	u D		ALPHA -2.3900 -2.4000 -2.4600 -2.5000 01335		4,50000 -2,41000 -2,48000 -2,48000 -2,48000 -2,48000
FARAMETRIC BATA	-2,000 OSINC = -15,000 E.EVON = -000:		CABS .045310 .046310 .046310 .055400 .055400 .059400		CABS .03780 .03800 .03270 .05170 .05070
FASA	# # # #	3,30	C4 .03480 .03480 .03880 .02570 .02570	5.93	CY .03600 .04690 .02600 .02960 .02960
	ALPHA FUDER FURER	-5.99/	CYN -,033480 -,03329 -,03329 -,02348	-5.00/	CYN -,139900 -,13490 -,13490 -,13290
		GRACIENT INTERVAL =	CBL -, cross s -, cross s -, cross s -, cross s -, cross s	GRACIENT INTERVAL =	
		GRACIENT	CAF .04115 .04130 .04130 .04130 .03200 .03230	GRACIENT	CAF .04350 .04100 .03870 .03870 .03400
		FUVL = 3.90	CA .10620 .10500 .10570 .09480 .09230 	RNVL = 2.99	44 10140 19690 19920 19920 199460
	26,5306 IN. 7,2900 IN.	81, 5 RW	0.0388 51489 51489 - 5229 - 52199 - 52199	91 / n RN	00800. 008700. 00000 00000 00000
	7A X0467 :: Y1467 :: Z1467 ::	RUN NO.	NO 000000°- 000000°- 000000°- 000000°- 000000°-	FUN NO.	00 - 00500 - 0
	2.4215 53.FT. 29.8495 IN. 39.8495 IN.		-8.060 -3.930 -3.930 -4.310 6.535 GRADIENT		6674 -9.090 -3.940 170 4.270 6410 6410
	2. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19		1,099 1,099 1,099 1,099 1,099		MACH 1.248 1.248 1.248 1.248

101	ت د		906.		_ 222222 _ 222222	_28888X
2046	(11 MAY 73		OCTING =		ALP44 561000 661000 751000 600000 615456	ALPHA5400059000640006900076000
	(KBM134)	PARANETRIC BATA	.000 0031MC -15,000 0.5WON .000		CABS .06240 .06270 .05970 .05700 .062700	CABS .05800 .05580 .05180 .05080 .05220
		PARA	# # #	8,90	67 .00010 .00000 .00000 .00000 .00130 .00130	CA .06390 .05630 .04130 .02720 .02610
			ALPHA RUCCER RUCFLR	-5.00/	CYN 04260 03410 03410 03490 .00151	* * * * *
	N BOOSTER			GRADIENT INTERVAL =	24F CBL -0.0489007019 -0.0486007019 -0.04860 -0.00000 -0.08900 -0.00000 -0.09001 -0.00001 -0.00041 -0.00001	CBL -, (1001.9 , (2000.0 , (2000.0 , (2000.0
53 + T9 SAN			GRADIENT	CAF .04160 .04160 .04160 .04020 .03500 00041	CAF .0440 .04240 .04050 .04040 .03470	
E DATA-1A9A	AMES 11-707 1A9 0RA + S3 + T9 SRM BOOSTER		ž ž ž	RNA = 3.97	CA .10710 .10630 .10130 .09730 .09500 00109	8 8 8 8 8 8
TABULATED SOURCE FORCE DATA-1A9A	AMES 11-7		. 7, 2950 IN. 7, 2950 IN.	82/ 5 RN	ត្តក្នុក្ស	0.00 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
TABULATED		2	2067 = =	RUN NO.	ON 05200 072400 00300 01400 07460	ON 05400
		REFERENCE DATA	2.4210 53.FT. 39.8490 IN. 39.8490 IN. .0370 SCALE		.8.190 -3.910 .230 4.320 6.540	PETA -8.030 -3.920 -1.920 -4.270
CATE 28 SEF 73		tř	SAEF = 2.4 LikeF = 39.8 BREF = 39.8		1.097 1.097 1.097 1.097 1.097	1.249 1.249 1.249 1.249 1.249

		906.
(KBM133) (11 mm;)	CATA	ORBING =
(KDM13)	PARAMETRIC CATA	2,000 -15,000
		ALPHA = RUDDER = RUDDER =
AMES 11-757 1A9 ORA + S3 + T9 SAN BOYSTER		26.5300 IN. 7.2900 IN. 7.000 IN.
		81 81 81
	47.45	Y YER P
	ATAT STATE	.4210 59.FT. .8490 IN.

SAEF = LAEF = BASF = SCALE =

	ALPHA 1,79000 1,79000 1,69000 1,69000 -,00467		4, P44 1, 6500C 1, 75000 1, 64000 1, 79000 1, 75000 1, 75000
	CABS .06330 .06340 .05930 .05860 .06060		CABS .03790 .03480 .03150 .03840 .05270
3.90	CY .06270 .03480 .03480 .02000 .02720 .02720	3.00	.046100 .04910 .03560 .03560 .02670 .02490
-5.00/	CYN04590039200230003260	-5.00/	CYN -, 04460 -, 03810 -, 03720 -, 03160
GRADIENT INTERVAL =	CBL 20010 -20000 -20000 -20000 -20000	INTERVAL =	CBL -, 000000 , 000000 , 000000 , 000000
CRADIENT	CAF .04370 .04380 .04190 .04170 .03400	GRADIENT	CAF .04490 .04490 .04040 .03930 .03660 .00064
RNA. = 3.96	CA .10700 .10810 .10130 .10030 .103460	W/L = 2,99	. 10270 . 10270 . 09190 . 09190 . 09270 . 09930
63/ D R	QLM .01780 .00130 .01190 02190 03293	93/ 0 - 8	004 .02160 .00360 .00900 .00900 .00900 .00200
NO.	CN -, 12270 -, 00700 -, 00910 -, 00900 -, 00900	RUN NO.	00 00000. 000000. 000000. 000000. 000000
	9£7A -6.000 -3.690 .220 4.339 6.340		9ETA -9.000 -3.910 .160 4.270 6.430
!	MAC. 1.102 1.102 1.102 1.102		1,246 1,246 1,246 1,246 1,246

193
PAGE

198	^		900			
PAGE 15					ALPHA 3.66000 3.66000 3.64000 5.77000 0.0734	A.PHA 3.92270 3.62270 3.72700 3.72700 3.7270000600
	(RBM136) (PARANETRIC DATA	O CRBINC =		285.0 0.060.0 0.060.0 0.060.0 0.060.0 0.060.0 0.060.0 0.060.0	CABS .05700 .05490 .05240 .05470 .05470
		PARANET	PARAMETRI = 4,000 = -15,000 = ,000		CY .05060 .04060 .02400 .02110 .02110 00275	CY .05650 .03630 .03010 .01950 .02070
			ALPHA RUDDER RUDFLR	-5.00/ 5.00	n'	CYN -, 0.4330 -, 0.4330 -, 0.2330 -, 0.2345 -, 0.2345 -, 0.2345
	ECOSTER			GRADIENT INTERVAL = -5.00/	AF CBL CYN 0.43500001004350 0.42500000003340 0.42500000002300 0.43500000002100 0.033500000002141 GRADIENT INTEXVAL = -5.007	
	AMES 11-707 1A9 CRA + S3 + T9 SRM BUOSTER			GRADIENT 1	0	CAF ,04560 ,04160 ,03970 ,03600 -,020043
. CATA-1A9A				RN/L = 3.98	CA .10560 .10430 .10330 .10330 .09710 00013	CA ,10250 ,09810 ,09420 ,09420 ,09070
TABLATED SOURCE FORCE DATA-1A9A	AMES 11-70		28.5996 IN. 7.2906 IN.	84/ D KN	CLM .mr210 01720 02270 03090 0165	01010 - 010100 - 010100 - 101-100 - 102010 - 102010
TABULATES		*	7947 7947 2947	RUN NO.	O ::0100 .01100 .01100 .01900 .02000 .00158	008250. 008250. 008250. 008250.
		CARLODINE CA	REFERENCE DATA 2.4210 59.FT. 39.8490 IN. 09.8490 IN.		9ETA -7.960 -3.970 .160 4.320 8.310 64.310	BETA -7.970 -3.910 -1.60 4.277 8.410
F 25 46 25 4	2 3 K		SADT = 2,4210 LAET = 39,6490 BRET = 39,4490 SCALE = COORD		M. 1.1.00 1.1.00 1.1.00 1.1.00 1.1.00 1.1.00	MCH 1.248 1.248 1.248 1.248

(11 MAY 15)

TE 28 SEP 73

The second secon

TABILATED SOURCE FORCE DATA-1A9A

AMES 11-757 [A9 ORA + \$3 + T9 SRM BOOSIFE

		;	2 2 3 4				
PARAMETRIC DATA					5.61000 5.77000 5.74000 5.74000 5.82000 08853		4,P44 5,66000 5,71000 5,64000 5,76200 -,00236
		O ORBING =		CABS .06230 .06130 .06300 .06510 .06530		CABS .05710 .05480 .05370 .05380	
FARANETI			6.000 58 = -15.000 500. = 81.	8.99	CY .04430 .02750 .01150 .00460 .00810	9.90	CY , D4450 , D3150 , D1270 , D1270 , D2950 , D2536
			ALPHA RUDDER RUDDER	-5.00/	CYN -,03600 -,02495 -,01450 -,01210 -,01790		CYN 03690 02630 01760 01860 01950
				GRADIENT INTERVAL =	CBt. .000000. .000000. .000000. .000000.	GRADIENT INTERVAL = -5.00/	
				GRACIENT	CAF .04319 .04260 .03630 .03360 .03360	GRACIENT	CAF .04510 .04320 .94180 .03860 .03570
			ż ż ż	FBV/L = 3.98	. 10340 . 10410 . 10390 . 10340 . 09890 - 00009	FN/L = 2.99	250 2520 29790 29850 29840 29890 20890
			28.5300 IN. 7.2002.7.	85/9 19	-, 01326 -, 01326 -, 02250 -, 02350 -, 03560 -, 03560	95/ D R	ALD 02510 01700 01970 03010
		.	246 P = 2767 P = 2767 P = 1	HUN NO.	ON .02600 .03000 .03000 .03200 .03200	FUN NO.	00 10. 00 20. 00 20. 00 250. 00 250.
		REFERENCE CATA	2.4210 59.FT. 39.8490 IN. 39.8490 IN.		9£1A -7.980 -3.920 .140 4.290 8.490		DETA -7.960 -3.910 .150 4.270 8.400
		Đ.	2.45 = 2.45 1.		1,190 1,190 1,190 1,190 1,190		1,247 1,247 1,247 1,247 1,247

103	•		896. 000.					
PAGE 1	(11 MAY 73		n n		ALPNA 7.74000 7.72000 7.69700 7.74000 07835	ALP44 7,92000 7,82000 7,79000 7,79000 -,00467		
	IC DAT				6.990 GEBN -15.990 ELEW -990		CABS .06310 .06410 .0640 .0680 .0680	CABS .05840 .05800 .05590 .05710 .05890
		PARA	1 11 11	3.90	CY .02690 00100 01280 01280 00209	04 .00990 .01200 00120 00200 00390		
ı			ALPHA RUDGER RUSPLR	-5.90/		CYN 02920 01780 01080 01160		
	RM BOOSTER			GRADIENT INTERVAL =	AF CBL CTN 0.4110 .0000002710 0.3580 .0000001540 0.3580 .0000000420 0.3140 .0000000750 0.0000 .0000000750 0.00001 .00000	.00000 .00000 .00000 .00000 .00000		
	AMES 11-707 149 CRA + 53 + 79 SRM BOOSTER					0	CAF .04500 .04260 .04170 .03790 .03450	
E CATA-1A9A			ž ž ž	KN/L = 3.97	CA .10420 .10360 .10440 .10510 .09960 .00016	CA .10345 .09875 .09800 .09540		
TABULATES SOURCE FORCE DATA-1A9A			28,5395 IN. 7,2905 IN.	87, 5 KN	0.000000000000000000000000000000000000	Q.M 01830 02730 02130 03150		
TABULATEE		TA.	1986 1986 1986 1986 1986	RUN NO.	ON ON NO.	08.00 .04900 .04100 .03400 .03400 .03800		
		REPERENCE DATA	2.4210 SQ.FT. 39.8490 IN. 39.8490 IN.		-7.970 -3.910 .145 4.280 8.489 GRADIENT	PETA -7.950 -3.900 .140 4.285 6.420		
PATE 28 SEP 73		· cr	SGC = 39.6 BGC = 39.6 SCAE = 3.6.6		1,097 1,097 1,097 1,097 1,097	MACH 1.245 1.245 1.245 1.245		

(ET WAY 13) (EE PRAY 73)

PARAMETRIC DATA

AMES 11-707 1AS ORA + S3 + T9 SRM BOOUTER

	g G					
	# #		4.6700 -6.68000 -6.71000 -6.77000 -9.67700		A.PHA -6.51900 -6.56900 -6.65900 -6.75900 00649	
PAKAPETATIK SALIS	.000 0681MC .000 ELEVON	CABS . DYYZO . D6790 . D6290 . D8500 . G8710			CABS .06110 .03939 .03420 .03130 .03130	
TAXAT	# FT	5.90	CY -,03620 -,03620 -,03620 -,02720 -,02720	3.00	CY 01180 04070 04060 05620 00114	
	ALPHA RUDSER RUSPLR		CYN -,01120 ,00000 ,00000 -,00780 ,00000	/00'5-	CYN -, 20610 ,00530 ,00530 ,00730 -,00203	
		GRADIENT INTERVAL = -5.00/	COL. 190919 190909 190909 190909	GRADIENT INTERVAL =	GE. .00000. .00000. .00000. .00000.	
		CRADIENT	.03150 .03150 .03150 .03150 .02710	GRACIENT	CAF .03400 .03080 .02870 .03040 .02690	
	* * *	RNA = 4.51	CA .10040 .09920 .09900 .08600 .08420	RVL = 3.00	CA .09310 .09310 .08290 .08420 .07820	
	26,5350 IN. 7,2956 IN.	50/ D RN	0.05900 0.03420 0.0400 0.0520 -04630 -05500	55/ D RN	ALM .0360 .03610 .02020 04610	
REPERBACE DATA	7986 = 2986	RUN NO.	ON 14900 09600 05100 00700 .02600	RUN NO.	1540? 1540? 05709 01309 .02309	
	2,4215 59.FT. 39,8490 IN. 39,8490 IN.		9ETA -7.990 -3.990 .270 4.420 6.690		9ETA -7.970 -3.910 .190 4.339 8.500	
œ.	STOT = 2.4 UNIT = 39.6 STOT = 39.6		1,105 1,105 1,105 1,105 1,105		1,251 1,251 1,251 1,251 1,251 1,251	

	(RBML4D) (11 MAY 13)
TABLLATED SOURCE FORCE DATA-IASIA	AMES 11-707 1A9 ORA + S3 + T9 SGN BOOSTER
CATE 28 SEP 73	

			006	88.				
*****			H	н я У В		4,51000 -4,51000 -4,51000 -4,51000 -4,60000 -4,60000		ALPHA -4,39200 -4,41000 -4,53000 -1,01462
	(RBM145)	PARAMETRIC BATA	-4.900 OEBINE			CABS .06670 .06410 .06130 .05510 .05690		CABS .05830 .05760 .05360 .05540
5		PARAM	ŧ	1 11 11 ex ex	8.90	CA 0350° 0250° 0221° 0450° 0450° 0450°	3. 00	CY .04310 .02770 .01260 .01260 .01360
			400 17	5 5 5	-5.00/	CYN -, DZ940 -, DZ940 -, DZ650 -, DZ650 -, DZ6070 -, D30071	/00'5- :	CYN 03110 02590 01940 02490
	N BOOSTER				GRADIENT INTERVAL =	CBL -, 20019 -, 20010 , 20000 , 20000 , 20000	GRACIENT INTERVAL =	
	S3 + T9 S6				GRADIENT	CAF .03660 .03500 .03660 .03150		CAF .04070 .03770 .03490 .03710 .03170
	AMES 11-707 1A9 (2A + S3 + T9 SEN BOOSTER			<u> </u>	RNL = 3.99	CA .10550 .10310 .09410 .99170 .99000	RNL = 3.90	CA , n9900 , n9940 , n8690 , n8250 -, n9764
	AMES 11-7			28,5390 IN. 7,2900 IN.	51.0 6	0.04820 .04820 .02220 .00020 .00130 .04100 .00140	36/ D R	M.D 204650. 202520. 202510. 202650. 31570.
ואפתראונה פנשנה			4	1 4367 1 4367 1 2067	FLY NO.	NO 20860 00860 00860 007700. 007700.	RUN NO.	NO 000460 000300 000300 000300 000300 000300
			REPERDICE CATA	2.4210 50.FT. 39.6490 IN. 39.6490 IN.		BETA -6.030 -3.930 .200 4.320 66.53		BETA -6.040 -3.940 .170 A.270 8.420 GRADIENT
CATE 28 SEP 73			er e	1.40 = 2.4 LATE = 39.8 BASE = 39.6		MAC+ 1.100 1.100 1.100 1.100 1.100		0.62.1 0.63.1 0.63.1 0.63.1

	(RBY141) (11 HAY 73)	
ASCENSION CONTRACTOR C	AMES 11-707 1A9 02A + S3 + T9 SRM BOCCTES	
r.		

	8 8		
	11 11		APPLA
PARAMETRIC GATA	OCEINC D. ELEVON		C.BS .04410 .0420 .0470 .0470 .0470 .0470 .0470 .0480 .0480 .0480 .0480
PAKAMETH	699. 990.		9010 9110 9110 9110 9100 9100 9100 9100
	ALPHA = RUCCER = RUCCER =	00'8 /0	
		0.8- = .	CTN0422003400024100241003410034100426003400034000340003400034000340003400
		GRADIENT INTERVAL = -5,00/	CALCASED00010044200001004450000100445000000034300000003430000000424000000042400000004240000000424000000042400000004240000000424000000042400000004240000000424000000
		GRACIEN	CAF .04320 .04150 .03450 .03430 00053 GRADI EV GRADI EV .04240 .04240 .04240 .03450
		3,98	CA10730 19170 .09710 .09520 00110
	.wi 0002,7 .wi 0000,	S RNL =	
	6 2 . .	. 52/ 9	
ATA	DORF TWRF ZNRP	N NO.	0. 105900 -
RESTERENCE CATA	2.4215 53.FT. 39.6495 IN. 39.6495 IN. .6395 SCALE		9ETA -0.090 -3.910 -3.930 68.330 68.330 -3.520 -3.500 -3.500 -3.500 -3.500 -3.500 -3.5
-	Sett = 2. UREF = 39. SCALE = .		MACH 1.103 1.103 1.103 1.103 1.103 1.247 1.247 1.247
	₹7.7 ED #1		

FACE

<u> </u>	E		98.	
FACE	(11 MAY 73		# # \$ \$	ALPNA 3. escric 5. reserve 5. cerum 7.
	(4BM 42)	PARANETRIC BATA	4,000 GLEVON -5,000 ELEVON .000	CABS -096200 -061201 -051200 -050300 -
		8 4	ALPIA = rucker = -	5.00 CY .03670 .02490 .012490 .03700 .03700 .03700 .03700 .03700 .03700 .03700 .03700 .03700
			7. P. P. P. P. P. P. P. P. P. P. P. P. P.	-5.00/ CrN0433902360023600236002360024000236002360
	RH BOOSTER			CAFELDAT INTERVAL = CAF
	20 + 52 +			
TABULATED SOURCE FORCE DATA-1A9A	AMES 11-757 1A9 GRA + S3 + T9 SGN BOOSTER		żżż	CA .10360 .10400 .10320 .10320 .10320 .10320 .10320 .10320 .10220 .103420 .103420 .103420 .103420
SOURCE FOR	AMES 11-		29,5300 IV. 7,2900 IV. .0000 IV.	23, 2 Mg
TABULATED		4	WASP C	ON
		ESTERBACE DATA	2,4215 Sa.FT. 39,8495 IN. 39,8490 IN. .0308 SCALE	BETA -7.960 -7.960 -7.970 -7.970 -7.970 -7.970 -7.970 -7.970 -7.970 -7.970
CATE ZO SEP 73		•	2, 13,50 1,00 = 13,00 1,00 = 13	MACH 1.100 1.100 1.100 1.100 1.100 1.246 1.246 1.246

(EBM 43) (12 MAY 75)

AMES 11-707 1A9 OZA + S3 + T9 SRM BOOSTER

PARAVETRIC BATA

1	§ §				
	ii ii U 22		7.6557. 7.7557. 7.75570. 7.65570. 7.65570.		7,9120 7,8420 7,7720 7,7230 7,7330 7,7330
	O CEBING =		CABS - 176220 - 176430 - 176430 - 176900 - 176900		CABS .058620 .055640 .055890 .057990 .050018
	8 5 .000 8 5 .000 8 5 .000	3°°5	CY .02970 .01010 -,00340 -,01490 -,00305	5.30	CY .02730 .01040 00170 00180 00186
	ALPHA RUDGER RUDGER	-8.99/	CCN -,02700 -,01420 -,01420 -,00410 -,0060	-5.90/	CYN -, 02749 -, 01119 -, 00929 -, 00990 -, 00990
		GRADIENT INTERVAL =	Control of the contro	GRACIENT INTERVAL =	40 202000 2020000 2020000 2020000 2020000 2020000 2020000 2020000 202000 202000 20200 2000
			CAF .54036 .03960 .03645 .03645 .02960		CAF .54460 .54145 .53760 .53425 .53425
	<u>د</u> د د	RN/L = 3.97	CA .10370 .10350 .10350 .10450 .09880	RIVL = 3.51	CA
	28,5300 IN. 7,2900 IN.	54/ U RIV	0.0 - 0.0250. - 0.0250. - 0.0250. - 0.0250. - 0.0250.	59/ U RN	01730 01730 01693 02080 02080
€.	2 d342	EUN NO.	00 000000 000000 000000 000000	FUN NO.	00 00 00 00 00 00 00 00 00 00
REFERENCE CATA	2.4210 SA.FT. 39.8490 IN. 39.8490 IN.		967A -7,960 -3,940 4,260 8,490 68A01ENT		0ETA -7.940 -3.900 .140 4.270 6.420
ō.	2.45 = 29.40 to 20.40		1.15 1.15 1.15 1.15 1.15 1.15 1.15		1.245 1.245 1.245 1.245 1.245

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CATE 28 SEP 73		-ABILATEE	SOURCE FOR	TABILATEE SOURCE FORCE DATA-1A9A						
			MES 11-	INES 11-757 IA9 (28A + 53 + 79 SRM BOOSTER	2 67 + 52 +	RW BOOSTER			(Egytas)	6 25 MAY 73 3
·	OPERSONEE SATA	•						PARA	PARAMETRIC CATA	
								!	N. C.S.	2027.1 2
34EF 2 2.	2.4215 SB.FT.	E AND	26,5300 IN.	.w.			F. D.S.		- MONG 12 000.	
ľ	39,8495 IN.	11 13 14 1	7.2967 IN.	ž.			20.8			
11	39,6490 IN.	11 11 12 14 14 14	.N. 2000.	ž.						
	CHANGE SCALE							1		
		HUN NO.	1577 S R	RN/L = 4.05		CEADIENT INTERVAL =	-5.95/	8.8		
			;	i	47	é	ž	Շ	CABS	BETA
MACA	AFR	3			19970	Groce	.90745	91573	01990.	33300
000	-6.43G	00870	Desir.	19690	.01080	-,00010	-,95660	crace.	.046TB	00000
	16.380	10000	Double -	06030	.01375	-,90019	51735	172683	C1975	
8 .		Corporate -	57500°-	01090	.01475	-,00015	-,72145	03230	245	
	(A)	00000	06010	08560	.51540	00000	-,92196	6266	1	
18 . 1	202	DOT .U	51575	06030	.01540	occio.	-,01930	. 1278n	15 M.	
3	25.1	12.000	130 T	උපැපුරු*	00610	00000	51470	1357E	(A ()	
206	3,750	DOMEST.	06233-	.06160	.01450	COLOG.	- 255671	NATO.	0.000	
20	55.4°C	100000	07870	01190	1000	30006	.05760		31337	
E08.	7.73	000000	77057	ACCCO.	71000	19999	30036	1,000.		0 444
	SEALIEN.	a ū		RVA = 4.49		GRADIENT INTERVAL =	136.8-	5.00		
						ŧ	3	Ծ	CABS	X X
₹ S	AMPIN	z	r T	<u>ა</u>	3	4 6		-,53259	.03270	.250E5
106.	9.610	04600	00490	02170.	derio.	90000	1	06800	09060	.2222
186	-6.515	03200	22100	08245	Jec. P.	2000	ילשואו	Create.	17887	20000
176.	-4.453	00020*-	-,90240	27360	04420	0.000	tall of	03170	24719	3336
106	-2.295	-,00899	-,00620	.07519	- NZE	0.0000	1376	1937	26972	-
8	.360	00300	S197	£1940*	12620	2000	1000	13881	14.619	: (60.00)
6	1.627	01600	27770	07770.	ERROS.	1.0.0.0.0	0.000	20.6	(2) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	(A) (A)
5	3,650	02750	-, 92300	12870	12820					المنافق المنافق المنافق المنافق المنافق المنافق المنافق المنافق المنافق المنافق المنافق المنافق المنافق المنافق
, i	5.67	1385U	:1266	01640.	22725		300 ST -	Section 1		Canada.
5	7.647	200	11294C	17970	112620			2000	وديوي	116.5
•	GRACIENT	78830	-,00262	£2555	10,810,		1000			
		9 20 20	0 /601	FRV.L = 3.98		GRASIENT INTERVAL =	/90'5- =	5.3 6		
		ı				!	i	č	(A85	V. 3
Q W	ALPHA	ક	ð	ð	CAF	4		T. P.C.	C2890*	18: CH
	E19.6-	04300	020000	.092 <i>7</i> 0	08420		98.00	5	G1630	-26 VIII
	4	CACAGO.	192.0	0 29 64	.03260				2.630	36.50
201.1	100	GLA ZU	00100-	39760.	099907	5:555-	SHEET I		(d. 90	26:33
1.103			1 14 67	U\$660°	03760	- 1000	Side Fig.	1969		
501.1	13.0.7-	CAMPONS		100.00	COOKED.	0.100.0	COST 1	****	in the state of th	
1.15	hn.	100000		10220	06030		09 9 66	5		
1,103	1.67			CANC.	17.190	والمتعاول	-,02600			- K.
1.103	3.623	13C2G			12.2	CHERRY.	-,01962	10.00 E		4. ·
1.103	er.				546EG	* زين آويق في	0.00 4. 00 4.00	5887		## ##
1.193	7,710	20	F. # #		10	والرافية	130 m	200,00	en en en en en en en en en en en en en e	900 1000 1000 1000 1000 1000 1000 1000
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TABULATED SOURCE FORCE DATA-IA9A

(ABM144) : 15 447 75 3 AMES 11-707 1A9 ORA + S3 + T" SAW BOOXTFD

	ξ. C.		

	CENTRO PLEASE		•
PACANETEIC CATA	8 8 8		25.00 25.00
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	# 5 5	-5.95/	Crn .00000 .01440 .020000 .02000 .02000 .02000 .02000 .02000 .02000 .02000 .02000 .020000 .02000 .02000 .02000 .02000 .02000 .02000 .02000 .02000 .020000 .02000 .02000 .02000 .02000 .02000 .02000 .02000 .02000 .020000 .02000 .02000 .02000 .02000 .02000 .02000 .02000 .02000 .020000 .02000 .02000 .02000 .02000 .02000 .02000 .02000 .02000 .020000 .020000 .02000 .02000 .02000 .02000 .02000 .02000 .02000 .02000 .020000 .02000 .02000 .02000 .02000 .02000 .02000 .02000 .02000 .020
		INTERVAL = -5.00/	CB.
		GRACIENT	CAF .02810 .03110 .03450 .03450 .03450 .04080 .04160 .04070
	 	RNL = 3.05	CA .04560 .04560 .04560 .09010 .09100 .09560 .095770 .09560
	28,5355 IN. 7,2955 IN. .7005 IN.	115/ G R	00000- 000000- 000000- 000000- 000000- 000000
7.	11 11 11 11 11 11 11 11 11 11 11 11 11	RUN NO.	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
REPERENCE SATA	2.4215 53.FT. 39.6497 IV. 39.8495 IV. .0395 SCALE		ALPHA -6.619 -6.430 -4.372 -7.372 1.745 9.737 5.737 GRACIENT
	SEET 2.		

CATE 28 SEP 73	8 8		TABLEATED	TABULATED SOURCE FORCE DATA-1A94	E SATA-IA9A						PASE 313	
				AMES 11-79	ANES 11-757 IA9 ORA +	S + 79 E	• 19 EXTERNAL TANK			1 (1000)	0 85 48 EE	
	ū	SPERFICE CATA	4 1						PAEA	PAGANETRIC CATA		
!	•			II telegia esc	نږ			ET.	į)	= 30.530 odd		
	79.8495	7.4215 Services	i ii dide.	2000 IN.	: ½*			REDDER REDDER	n 1	385. 386.		
	39,8495	1895 T.N.	Z148FF ::	: GOOG:	ż			Ş	ı			
SCALE :	i i	SOO SCALE										
			RUS NO.	No 0 /6	25" = 1/AS	GRACIEST	INTERVAL =	5.05/	S.03			
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\$	FAC.	A: PW	Š	H	5		00260	D1600°	91370	.:ea:		
•		-6.145	42750	2000	1	55523	12200	932TS	130260	.16750		
•		6.135	- 3000	DE PAT	55755	05180	-,90299	99039		. 16560		
		2000	GOLDE -	1200	22543	CE895.	00160	35000	07400			
•		(M)	00080	06085	.22440	.97133	-,06296	. 95543	10116°-		200	
•		136.1	1,18000	1001	26612.	£69£*	18180°-	0.226			0.00	
• •		3,930	30100	17527	.21455	016910	-,90230	10000			ي	
•		3.9781	.424TF	-,23247	2002	38880	0.000	14.46		@#S#8.		
•	:00:	7.995	.5520	28920	1962.	28690	- 02020	66.00	16100	A6230*-	الغيقيقا	
		GRACIENT	956£U*	-,527.5	00157	SCIACI.						
			RUN NO.	57.0 RB	RVL = 4.50	GEACIEN	GRADIENT INTERVAL =	190.6-	26.5			
							ŧ	ž	b	193	i,	
3	MAG	ALPHA	ž	j	3	4		CENTO	10000		Geo. 25	
•	\$06	-8.020	-,43500	.14150	227.5	00000	- 1752ET	Carrier C	SERECT -	18 2	2002	
•	606.	-9.960	1.29em	OKENI.	UT 92.	TACTOR.	1903.4	2222	30285 -	11001		
•	\$06.	-4,999	-,16425	1000	12862.	CRECT	1.002T	9:300°	900	27000		
•	5.6	1.98.1-	13000	THE STATE OF	29350	.11500	17,120.1	00000	\$2085 -			
	n N	1300	State C	-14750	.22567	.11560	1,171259	GIRDS.				
	0 8	100 A	34000	- 2 2 2	25952		-,09219	10.00 m		, i	The second	
•		6.000	.44100	-,23930	.29230	1.00	1975	8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		4	Co. Co.	
	ę.	8.03B	.55700	1.2367	2525	562::	THE STATE OF		00	and the same	Section .	
	5.6	10,000	, 666. M	E STATE OF THE STA		100000	C. 8 4 6.	212-215	100	Serect -	القسمة والمساهرا	
		SEACTENT	.: 628 6	-,72628	11 11 14 14							
			FUN NO.	Er Cr	RKC = 4.95	TABLES :	T INTERVAL	(A) 40 0				
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•	1.174	-0.010	1 (a)	60.00		8	E 19.22	13:12.	11.20		٠ •	
••	1.174	-9.99	1212 E E E E	10 to 10 to	44387	32.15	- 18 - 6.		7.4	1000	(v.)	
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••	71.1	· · · · · ·	(a grade	Called San -	100 to 10	744.62	1.301.7	17.	() () () () () () () () () ()	# () 	1.20 6 5	
•• •			1. 19 E	30.00	TOT. 25.2.	24.46	保証ので		No.			
•	4 () 4 ()	(S) S	7	1000	(13 E 2 .	27, 22				, A.	; ; ;	
• •	91.4	700	A. 975.		17617	-722.					Section .	
• •	0.	60 00 00	è÷÷	1,848.1	- 5627	e i		19 19 19 19 19 19 19 19 19 19 19 19 19 1	(+ 9) ; , , ,	4 2 4	Jacker, J.	
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(ST TAN E I I HAT 73)

TABLEATED SOURCE FORCE DATA-1A9A

AMES 11-707 149 324 + 55 + 19 EXTERNAL TA-R

PAGANETRIC DATA

1.935	<u> </u>	
# Deligh	# # M S G	
	565 565	
E 478	AUNTA :	
	28,53951 IN. .0000 IN. .0000 IN.	
	n u +	
	100	
, , , , , , , , , , , , , , , , , , , ,	2.4215 53.FT. 39.8495 IN. 39.8497 IN. .0356 SCALE	
	SKEF = CAREF = BACF = SCALE	

	Manager of the control of the contro
	CABLV .20990 .20400 .19770 .19670 .17670 .17770 .18510 .18510
3.95	07 0.01670 0.02100 0.00000 0.00000 0.00000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00
-5.95/	CYN
CRADIENT INTERVAL = -5.007	CB 200000 - 200000 - 200000 - 200000 - 200000 - 200000 - 200000 - 200000 - 200000 - 200000 - 200000 - 200000
CEACIENT	CAF .22599 .23496 .24586 .25489 .25290 .26220 .2666 .2666 .24829
RWL = 3.00	43380 43380 44380 44480 44480 43920 43920 43670 -,00062
2 0 %	16840 116840 116810 19870 19870 1977
ACK NO.	00 - 47600 - 32600 - 18700 - 18700 - 22100 - 37700 - 47000 - 58600 - 58600
	ALPHA -6.000 -5.980 -4.030 -1.980 -1.980 -1.980 -1.980 -1.980 -1.980 -1.980
	MACH 1.290 1.290 1.290 1.290 1.290 1.290 1.290 1.290

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24 GF 24		TABULATED	SOURCE FORC	TABULATED SOURCE FORCE DATA-149A						PAGE	118
			AMES 11-7	AMES 11-707 1A9 ORA + 53 + 79 EXTERNAL TAIN	SS + 79 E	XTERNAL TAN	×		(KBI/ZOZ)	(11 MAY 73	_
		i						PAR	PARANETRIC DATA		
ù	STERENCE CATA	¥4.								,	8
	20.FT.	e de	28.5300 IN.	ż			BETA	BETA =	CONTRACTOR OF STANK	p: 11	900
ŧ	2. 0.00		.0000 IN.	ż			3 6				
ı fı	NI GE		.0000 IN.	ż			§	אמערנא -			
, 	DOWN SCALE										
		Š	رو در	RN/L = 4.01	CRADIDA	GRADIBNI INTERVAL =	-5.00/	9,00			
					;	(3	ځ	CABLV	BETA	
5	ALPHA	3	T U	5	3	9	04040	-,01530	.17460	05050	
\$66.	121.0-	46000	.17000	22040	08690	IK ICE	06100	0017D	0.1691.	00000	
866.	-6.520	-,32900	.11240	G8622.	010001	08100	01100.	00330	.16519	CCCCCC*	
\$65.	0.66°E-	20803	06290	09927	01170	00230	.00230	-,00640	.15850	00020	
965.	-1.910	00060*-	01510.	(20672)	CK CK C	-,00120	06100	00390	115520	00020	
96G.	C20.	00620	00000	24.6%	06990	-,90159	00250	00670	.15190	00020	
966.	2.020	14550	1,000,00	2167	0079	90220	-,00610	.00710	.15270	02020	
966.	4.020	272.	133501-	2000	.05760	00240	-,00280	-,00250	.14960	02020	
86€.	6.010	3900	1000135-	1991	0.04630	00160	01723	.02040	.15185	. DZ:KE	
965*	9.000	31975	CC+02*-	19600	STATE -	00000	12000-	20100	00158	-,022,020	
	GRACIENT	69690	:E72.	2000 - A.48	•	GRADIENT INTERVAL =	-5.00/	2,00			
		Ş				i	{	۲	787	BETA	
2	AL PHA	8	¥,U	ð	ঠ	1	2 2	- 01440	06661.	COCCO.	
8	9.000	-,47900	3.727	.29090	00160	(1000) -	0.400	07710	19040	00020	
8	(35)	34499	.11500	.28900	19860	- 11.665	08000	07010	17910	00020	
£ 6	-4.030	20700	02850.	.28380	19460	0.620.0	00800	0.0820	.17560	00020*	
5	1.990	0.0800	-,00130	.2862	.11060	0000	08400	0.750 -	17,190	OKKIZO.	
5	G.C.	dassa.	-,56000	.28380	.11290	- (1026)	00340		.16760	00020	
5	2,540	18400	12640	.28310	.11550	(32)33	(A # 500	0.0030	.16970	00020	
£1.6	4.545	COSDS.	18030	.28270	11370	0.100	CASCA.	-,00360	27072	aciozu.	
£16.	6.035	422.10	-,22960	.28640	1.611	00000	05000	00100	.17849	00010	
£176.	الم المنات	. 52500	-,26690	.2862.1	19721	C#2121	- 077368	660500	99133	1300000	
	GRACIENT	.:6366	-,02955	-,1777126							
		RUP NO.	29/ O R	RIVL = 4.00		GRADIENT INTERVAL	-5.007	3.00			
					ţ	ŧ	3	გ	CABLV	BETA	
₽ P	ALPHA	ξ	ક	₹	4	3 6	CONTRACTOR OF THE PERSON OF TH	01050	.24399	CCC-20°	
1,192	-6.050	5270	.21270	.447.7	01632.	C#1/20**	079640	-,01240		00020	
1.192	-6.019	38100	.15219	.44640	70.00	09.00	123841	-,01159	00.622.	びんじるい	
1,102	-4,000	2493	.0963J	.44260	2156	Carton I	CASCO	0.00940		CHARRY.	
1,102	-1.995	11100	.03210	. 43625	7150	CK 100	00700	Ceenti		CHRO.	
1,192	080	CHESTO.	-,04730	.43790	17622.	0.0000	CARCAC	-,00650	20310	00020.	
1.102	1,990	.18870	12010	.4328₽	7.622	00000	Caeno	G9600'-	.20100	02020	
cut	0.89	.3277	:4880	.43123	.23023	1,6,6,6,6	10000	- 0.0720		00020.	
20	0.0	00522	-,24040	.42710	.22540	90110	September 1	02800		CHESTERS.	
2011	(6 . 4	0.7750	3848C-	.42450	.2:8:7	00150	000000	135000- 100000	•	DOMEST.	
202*1	N3:CVG	18240	739501	-,00132	25	90000	.00032	Partition.)))		
	£2000	1									

TABULATED SOURCE FORCE DATA-1A9A

TANK (RBINERE) (33 MAY 73 3	PARANETRIC CATA	BETA = .000 OKBINC = .500 RUDGER = .000 ELEVON = .000 RUGGER = .000	M = -5.00/ 5.00
TABULATED SCANE, POTE TOTAL TANK AMES 11-707 IA9 CRA + S3 + T9 EXTERNAL TANK		28.5300 IN. .0000 IN. .0000 IN.	RUN NO. 38/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00
73 TABULATED .		REPERENCE DATA 2.42:0 58.FT. XMFF = 59.8490 IN. YMFF = 59.4490 IN. ZMFF = 59.4400 IN. ZM	.0300 SCALE

SAEF TO LACE TO BACE TO SCALE

9ETA .02000 .02000 .02000 .02000 .02000 .02000 .02000	######################################
CABLY .21600 .20620 .20140 .19260 .19310 .18310 .18000 .18000	CABLV .205:0 .19940 .19310 .18710 .17900 .17890 .17890
C7 -,00520 -,00710 -,00720 -,00480 -,00480 -,00200 -,00200 -,00200 -,00200 -,00200	0.2 -, 0.0550 -, 0.0500 -, 0.0500 -, 0.0500 -, 0.0500 -, 0.0500 -, 0.0500
CYN ,00330 ,00460 ,00460 ,00450 ,00260 ,00000 ,000000 ,00500 ,00500 ,00500	CYN OCYN OCYN OCOSE OCOS
CBL -,00080 -,00130 -,00110 -,00140 -,00140 -,00160 -,00160 -,00100	GRADIENT INTERVAL: AF CBL 2419000060 2481000060 2536000050 2639000100 2647000120 2646000130 264013100130
CAF .21860 .23130 .24970 .25130 .25130 .25130 .25420 .255370 .254240	GRADIENT CAF . 24190 . 24110 . 25360 . 25350 . 26290 . 26390 . 26470 . 26890 . 26460
CA .43450 .43750 .44240 .44260 .43580 .43580 .43420 .43440 .43440	CA
	48/ 0 R
	ON NO, 53200 -, 36000 -, 23600 -, 09600 -, 15205 -, 15205 -, 40900
ALPAA ALPAA 060 -6020 03	APPA -6.090 -5.970 -5.970 -1.990 -1.900
1,249 1,249 1,249 1,249 1,249 1,249 1,249 1,249	1,401 1,401 1,401 1,401 1,401 1,401 1,401

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AMES 11-707 XME - 28,5395 IN. YME - 20,5395 IN. YME - 20,5395 IN. ZMF ON CLN -,44900 .15840 -,44900 .15840 -,44900 .15840 -,44900 .15860 -,44900 .15800 -,45700 .15800 -,45700 .15800 -,45700 .15800 -,45700 .15800 -,45700 .15800 -,45400 .15760 -,45400 .15760 -,45400 .15760 -,45400 .15200 -,45400 .15200 -,45400 .15200 -,45400 .15200 -,45400 .15200 -,45400 .15200 -,45400 .15200 -,45400 .15200 -,45400 .15200 -,45400 .15200 -,45400 .15200 -,45400 .15200 -,45400 .15200 -,45400 .15200 -,45400 .15200 -,45400 .15200 -,45400 .15200	28.530F INCODD IN.	GRADIENT INTERVAL CAF CBL .019903500 35203500 35203500 35203500 35203500 49100180 49100180 49100180 49201860 402003490 102003490 102003490 102003490	GRADIENT INTERVAL = MF CR. 0199003500 .0264002550 .041002550 .041003900 .041003900 .0420003900 .0420003900 .0420003900 .0420002650 .0390002650 .0370003400	ALP RUD RUD RUD 1.1460 0.11200 0.07230 0.0920 0.0020 0	# # B 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	FARAMETRIC ENTA -0.000 OKBINC .000 ELEVON .000 .20410 -001	
28,5395 .0000. .0000. .15930 .15930 .15840 .15870 .15870 .15870 .15870 .15870 .15870 .15870 .15870 .15870 .15870 .15870 .15870 .15870 .15870 .15870 .15870 .15870 .15870	IN. IN. IN. IN. IN. IN. IN. IN. IN. IN.	GRADIENT CAF .01990 .02840 .04810 .04800 .04780 .04780 .04780 .04780 .04780 .04780 .04780 .04780 .04780 .04780	INTERVAL = CB	ALP RUD RUD RUD RUD RUD RUD RUD RUD RUD RUD	ភ្លួសអ៊ីស៊ីស៊ីស៊ីស៊ីស៊ីស៊ីស៊ីស៊ី	6.000 OGB .000 ELE .000 ELE .000 ELE .19280 .19280 .17220 .17220 .17370 .17370 .17370 .17370	2 5
28,5390 0000 29, 9 29, 9 1159900 1159900 1159900 1159900 1159900 1159900 1159900 11	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	GRADIBNT CAF -01.990 -07.990	INTERVAL = CBL0350002550025500255003500015000150001500015000150001500015000150001500015000150001500015000150001500015000150001500	40.8 40.8 40.8 40.8 40.8 40.8 40.8 40.8	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ALPHA ALPHA -6.11000 -6.11000 -6.11000 -6.11000 -6.11000 -6.11000 -6.11000 -6.11000 -6.11000 -6.11000
00000. OLM 15900. 15900. 15000. 151000. 151000. 151000. 151000. 151000. 151000. 151000. 151000.	IN: IN: IN: IN: IN: IN: IN: IN: IN: IN:	GRADIBNT CAF .01990 .01990 .02640 .03920 .04410 .04800	CR33500355001500015000160001600016000240003400	-5.09/ -5.09/ -11460 -11200 -11200 -07230 -07230 -07230 -1160 -1160 -1160 -1160 -1160 -1160 -1160	5.00 CY .90390 .22960 .15010 .15010 16120 1620 16120		ALPAA -6.13000 -6.11000 -6.110000 -6.110000 -6.110000 -6.13000 -6.130000 -6.13000
2/ 0 CLM 115930 115840 115740 116440 115760 115	. 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	GRADIDNT CAF .01.990 .02840 .03820 .04410 .04810 .048000 .0480000 .0480000 .0	INTERVAL = CBL035000250002500015000160001600016000249002490	-5.00/ -11460 -11200 -11200 -11200 -07230 -07230 -07230 -11167	5.00 CY 30390 30390 13010 13010 16120	CABLV .20410 .19260 .18561 .17767 .1777 .17412 .17873	A.P.A. 4.1900 4.1000 4.1000 4.1000 4.1000 4.1000 4.1000 4.1000 4.1000 4.1000
2/ 5 CLM .159930 .15840 .15780 .15882 .15882 .15882 .15882 .158845 .158845 .158845 .158845 .158845 .15885 .15886 .1588		GRADIBNT CAF .01990 .02640 .03920 .0410 .0410 .04800 .04780 .04800 .04780 .04200 .04780 .04200 .04780 .04200 .04780 .04780 .04780 .04780 .04780 .04780 .04780 .04780 .04780 .04780 .04780 .04780 .04780 .04780 .04780 .04780	INTERVAL = CBL	-5.00/ CTN 14460 11200 07230 07230 .07870 .11160 .11160 .11160 .11160 .11160	5.00 CY .30390 .22390 .10420 16420 16420 16420 16420 16420 16420 16420 16420 16420 16420 16420	CABLY 20410 19280 18580 17760 17760 17770 17870 17870 189390	4,1900 -6,11900 -6,11000 -6,11000 -6,11000 -6,11000 -6,11000 -6,11000 -6,11000 -6,11000 -6,11000 -6,11000 -6,11000
27. 0 CLN .15930 .15840 .15840 .16840 .15870 .15870 .15870 .15870 .15770 .15870 .1		GRADIENT CAF .01990 .01990 .01990 .01990 .01990 .01990 .0410 .0480 .0480 .0480 .0480 .0480 .0480 .0480 .0480 .0480 .0480 .0480	CB03500 -03500 -03500 -01500 -01500 -01500 -01000 -01000 -01600 -01000 -01000 -01000 -01000 -01000 -01000	-5.00/ CTN 14480 1208 90920 90920 90920 1160 11160 14230 14230	7. 209900 309900 .	CABLV .251410 .19280 .18580 .17760 .17760 .1777 .1777 .1777 .1777 .1777 .1777 .17790	4, P44 -6, 13000 -6, 1100000 -6, 1100000 -6, 1100000 -6, 1100000 -6, 1100000 -6, 1100000 -6, 1100000 -6,
		CAF .01.990 .02640 .03640 .04410 .04410 .04800 .048	CBL .03500 .02550 .01500 .01500 .00790 .01670 .01670 .01670 .02490 .00402	14480 11200 07230 03960 .0920 .07870 .11167 .111693 5.00/	CY .30390 .15010 .15010 06011 16120 16120 23550 31060 31860 03860	CABLV , 27410 , 19260 , 16567 , 17767 , 17770 , 17410 , 17410 , 17873 , 18393	4,1944 -6,11000 -6,11
.15997 .15997 .15795 .16867 .17179 .15875 .15167 .15769 .15769 .15769 .15769 .15769		.01990 .02840 .03820 .04410 .04800 .04800 .04800 .03960 .00104 GRADIENT	.03500 .02550 .01500 .01500 .01500 .01600 .01600 .01600 .03490 .03490 .00402	14480 11200 07230 03960 .04230 .07870 .11160 .11160 .1160 .1160 .1160 .1160 .1160 .1160 .1160	.39399 .22960 .19010 .0010 .0010 .10420 .16230 .1060 .1060 .10360	20412. 24950. 24950. 27762. 2727. 2727. 27471. 26950. 26950.	0.001.9- 0.001.9- 0.0001.9- 0.0001.9- 0.0001.9- 0.0001.9- 0.0001.9- 0.0001.9-
.15940 .15790 .16861 .17170 .16840 .15870 .15760 .15760 .15760 .15760 .15760 .15760		.02840 .03920 .04410 .04910 .04800 .04800 .03960 .00104 GRADIENT	.02550 .01500 .01500 .00750 .01600 .01600 .01600 .03490 .00402	11200 07230 03960 .00920 .07870 .11160 .11160 .01893		. 1956. . 1776. . 1776. . 1777. . 1771. . 1839.	4.1100 4.1000 4.1000 4.1000 4.1100 6.1100 6.11000
.15795 .16860 .17100 .16840 .15800 .15760 00002 .14510 .14510 .14510		.03920 .04410 .04810 .04780 .04780 .03960 .00104 GRADIBNT	.01500 .00790 .00790 .01670 .01670 .02650 .03490 .00402	07230 03965 03965 .04230 .01867 .11167 .11167 -5.00/		27.00 27.71. 27.71. 27.17. 20.971. 20.901.	4.1000 4.1000 4.1100 6.1100 6.1100 6.11000 6.11000
.16867 .17170 .16849 .15877 .15187 .15760 -,00002 .197.7 .197.7				-,03962 -,09920 -,04870 -,11167 -,14230 -,5,00/	01420 01420 16120 31060 03620 03680 03680	. 1727. 1777. 1747. 1837. 1839.	-6.11000 -6.11000 -6.12000 -6.12000 -0.0001
.17170 .16845 .15875 .15147 .15760 -,00002 . 19/ 0 . 14515 . 14515 . 14515		.04910 .04780 .04780 .04230 .03960 .01104 GRADIBNT		.0220 .04230 .07870 .11160 .14230 .01893 -5.007	0435 16120 23530 31060 03663 0367	1737 17410 17410 1830 00134	-6.15000 -6.15000 -6.15000 -0.15000 -0.15000
.16845 .15805 .15145 .15760 00002 . 19/ 5 . 19/ 5		.04880 .04780 .04780 .03960 .03104 GRADIBM	-,01000 -,01670 -,02650 -,00402 -,00402 INTERVAL =	.07870 .07870 .1160 .14230 .01893 -5.00/	16120 16120 23550 31060 03860 03860	17410 17410 18390 00134	-8.11000 -8.12000 -8.13000 00001
.15875 .16147 .15760 00002 . 19/ 0 . 14510 . 14510		.04780 .04230 .03960 .00104 Gradient	-, fish of the control of the contro	.11160 .14230 .51893 -5.00/	1915. 23550 31060 03860 5.00	17870.	-8.12000 -8.13000 0001
.16147 .15760 00002 . 19/ 0 . 14510 . 14510		.04530 .03960 .03104 Gradient	02650 03490 00402 INTERVAL =	.11230 .14230 .01893 -5.00/	-,53566 -,31060 -,03660 5,90	.18390.	-6.13000
.15760 00002 . 19/ 0 Q.M .14510 .15220	10 E	LIGGED LIGGING GRADIENT CAF	DOLOR DOLOR INTERVAL = CBL	.01893 .01893 -5.00/	5.00 CY	00134	.0000
200002. . 197 ° . 198 ° . 14510 . 15226	2 9 8	CAF	Organie Interval = CBL	-5.00/ CYN	5.90 CY		
. 19/ 0 CLM .14510 .15220	9 8	GRADI ENT CAF	INTERVAL =	-5.99/ CYN	3°38		:
	CA .35670 .29880	CAF	ę	Š	Շ		-
	.29867	!			.	•	AH Y
	.29860	8	.03570	17350	.36260		-6.11500
		.07360	.02780	13620	.27590	10.522°	-8.11.6
	259475	02190	.01730	-,09190	.18310	.21350	13.25.1.8-
	£8995.	02380.	06300	04160	.08778C		
	.29180	.09640	00600*-	.05760	11120		Calabora -
-,46500 .15690	.2921	(192 2 (1)	-,01960	11930	19012	266.6	(6000)
462DD .1555D	30000	08780	-,02840	145.4			(A) (A) (A)
45670 .:4860	37.659	CK BOO.	53570	11/26/1	0.010		747684
-,000039 -,00006	00016	.00157	001435	.02449	o charle		.
RUN NO. 29/ 11 R	RN/L = 3.99	CRADIENT	GRADIENT INTERVAL #	/66*5-	5.00		
	į	9	Ē	ž	Շ	CABLV	ALFHA
	8000	17850	25050	17360	38960	.27100	-8.14DDD
		E 2	CINKL	-114560	.30150	.26481	-6.12000
	. 4440	00000	Coco	19947	Crienz	.25427	-8.12200
	.44245	1244	0.000	0.6560	10030	.24790	-8,11000
5227.0 .23560	.44370	3661	orcre.	Contract of the Contract of th	CHISTIN	.24320	-6.11500
-,525cm .23970		12022	03366	09990	C#211		
5260: . 21020		. Z. 134.	120000	3000	191497		
191924 191916.	.44210	.21000	1268ū	Tariba Tar	108 1E		
	.44680	.21250	03930	17.630	1.00.00.1 1.00.00.1		
49100 .17670	£2720	25777	100 By 100 to	0.7:11	FF+80	•	
\$9000 92100°-	· Charles	300.C.	- 100643	36.75	776.21		

(RENCEDS) (11 MAY 73)

-0.000 CKBING = .000 ELEVON = .000

ALPHA = RUCSER = RUCPLR =

GRADIENT INTERVAL = -5.00/ 5.00

39/ D 38/L = 3.00

HUN NO.

.NI 0000. .NI 0000.

2.0867 2.0867 2.087 3.000 3.00

2,421F 39,FT. 39,645G IN. 39,649G IN.

SAEF = UNEF = BAEF = SCALE =

SEPERENCE DATA

.36210 .26670 .19600 .19600 ..10410 ..20350 ..29380 ..39580

22230 .22230 .22230 .22230 .21110 .21110 .21460 .21460 .21460 .21460 .21460 .21460

ALPNA
-7.96000
-7.99000
-7.99000
-7.99000
-7.99000

CYN
- 16740
- 12740
- 12480
- 12480
- 12480
- 12800
- 12800

CBL .04940 .03800 .02720 .01360 -.01430 -.02780 ..03890

CAF .20890 .20960 .21220 .21270 .21870 .22890 .23270 .23350

44100 43540 43550 43550 43590 43690 43690 42700 42700

CLM .16790 .17620 .18787 .25580 .25580 .19030 .19030 .191711

-.53500

-,51400 -,50600 -,50300 -,50308

4.140 6.190 8.250 GRADIENT

ON -.49295 -.50395 -.51209

-6.1255 -6.1255 -6.050 -4.090 -2.020 2.080

MAQ+ 1.248 1.248 1.248 1.248 1.248 1.248

PARAMETRIC DATA

The transfer of the property of the second s

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SATE 28 SEP 73

Leef Bath Scale

8 8 CRBING # PARAMETRIC BATA 000° 000° 000° ALPHA :: SUDDER :: FUDPLR :: AMES 11-707 1A9 ORA + \$3 + T9 EXTERNAL TANK 28.5355 IN. .0005 IN. .0000 IN. GEERENCE SATA 2,4215 53,FT. 39,6490 IN. 39,6490 IN.

4,PM
-6,15090
-6,13000
-6,13000
-6,13000
-6,13000
-6,13000
-6,13000
-6,13000
-6,13000 .19720 .186603 .17720 .166803 .166803 .165803 .165803 .165803 .17430 .14850 .07170 ..07750 ..15960 ..24020 ..31127 GRADIENT INTERVAL = -5.00/ 5.00 CTN - 14570 - 11130 - 07170 - 00170 - 00240 - 00240 - 007680 - 11360 -CB. .03680 .02680 .01600 .00300 .00300 .01080 .01080 .02900 CAF -03230 -04930 -04930 -05560 -05580 -05930 -05930 -05230 -04660 10480 11080 111680 111680 111780 111780 110990 10990 10990 10990 197.53 00 -.31900 -.32400 -.32400 -.33400 -.33700 -.33700 -.33500 -.32500 Š. 35 -.0034 9ETA -6.040 -6.040 -2.000 -2.000 2.090 4.090 6.120 GAREIENT

CABLV .23160 .21620 ... 19260 ... 19260 ... 18990 ... 18 CY
.35970
.27610
.18780
.18780
.18550
-.11060
-.25610
-.26990 CNN
-.17349
-.13790
-.19640
-.19800
.06010
.16950
.14440
.17660 CBL .03930 .01930 .01930 .01010 .01010 .01010 .01010 .01010 .01010 .01010 .01010 .01010 .01010 RUN NO.

CAF .07790 .08390 .09120 .09730 .10290 .10290 .09670 Q_M .09020 .10070 .11369 .11390 .05940 .02120 C7660. GN -.31400 -.32700 -.34400 -.34500 -.32500 -.32500 -.32500 -8.160 -6.100 -6.100 -2.030 -2.030 2.070 4.140 6.190 6.190 6.220 404 668 668 668 668 668 668 668

4,1500 -6,1500 -6,11000 -6,11000 -6,11000 -6,12000 -6,12000 -6,12000 -6,12000 -6,12000

GRADIENT INTERVAL SE NO.

A trigge . -

.27390 .18881 .09580 ..10650 -.21020 -.31150 -.21050 رم .373ق ...16470 -..12890 -..12890 -..12890 ...15173 ...1560 ...17660 CBL .05150 .03900 .02660 .01200 -.01510 -.05670 -.05170 CAF .18670 .19420 .21300 .21730 .22130 .22130 .22130 CA .44970 .44050 .44480 .44280 .44780 .44740 1.05890 1.12110 1.13750 1.14680 1.14020 1.12730 1.12730 1.10590 ON --, 335000 --, 3500000 --, 3500000 --, 3500000 --, 350000 --, 350000 --, 350000 --, 350000 --, 350000 --, 3500000 --, 3500000 --, 350000 --, 350000 --, 350000 --, 350000 --, 350000 --, 3500000 --, 350000 --, 350000 --, 3500000 --, 3500000 --, 350000 --, 3500000 --, 3500000 --, 3500000 --, 3500000 --, 3500000 --, 35 9ETA -8.190 -6.110 -4.080 -2.090 2.090 4.140 6.210 6.210 6.220 1.098 1.098 1.098 1.098 1.098 1.098 1.098

ALPHA
-6,07200
-6,06700
-6,06700
-6,06700
-6,06700
-6,06700
-6,06700
-6,06700
-6,06700

CABLV .26300 .23495 .24630 .24480 .22580 .22720 .22720 .23840

III

TABULATED SOURCE FORCE DATA-1A9A

AMES 11-707 1A9 OZA + S3 + T9 EXTERNAL TANK

(RBWZD4) (11 MAY 75)

PARANETRIC DATA

	\$ \$		
7	OFBING = ELEVON =		ALPHA -5.97000 -5.96000 -5.96000 -5.96000 -5.96000 -5.96000 -5.96000 -5.96000
<u>.</u>			CABLV .22270 .21140 .21140 .20150 .19990 .19990 .20150 .20150
PAKATE IN I CO.			ភ្នែង
•	ALPIN "RUDDER "	3.05	CY .36320 .27320 .18940 .09550 -,19680 -,26780 -,34330
	₹ 2 E	-9.00/	CYN -,15920 -,16660 -,04600 ,04600 ,11710 ,14760
		GRADIENT INTERVAL =	687.00 68560 61240 61240 61240 61240 61240 61240 61240 61240
			CAF .ZZZZO .ZZZZO .ZZZSO .ZZSSO .ZSSTO .ZSSTO .ZSSTO .ZSSTO .ZSSTO .ZSSZ
	ž ž ž	RN/L = 3.00	CA .4290 .43970 .43700 .43720 .43720 .43240 .42680
	28.5300 IN. .0000 IN. .0000 IN.	45 / C	00.0 11350 11350 11350 13520 13580 12880 12880 12880
EATA	2747 H	SCN NO.	CN 33720 34920 34920 37920 37100 37100 37100
REFERENCE DA	2.4215 53.FT. 39.849. IN. 35.6495 IN.		86.4.190 16.4.190 16.4.190 16.4.190 16.4.190 16.4.120 16.
	SEEF "		MACH 1,245 1,245 1,245 1,245 1,245 1,245

TABLEATED SQUECE FORCE DATA-149A
SATE 28 SEP 73

		}					1	PARAMETRIC CATA		
	***						PAR		-	
A STATEMENT OF	<u> </u>					:	,	Part Section 1	1	
2.4215 59.FT. 39.6495 IN. 39.8495 IN.	12 48 48 48 48 48 48 48 48 48 48 48 48 48	.N1 0000 .N. 0000 .N. 0000 .N.	żżż			ALPHA RUDDO RUDDO	" " " ~ ~	OCCUPANTO COCCUPANTO C		8
- Control	S. S. S. S. S. S. S. S. S. S. S. S. S. S	11/5	RNL = 3.97	CRACIENT	CRADIENT INTERVAL =	-5.99/	3.00			
			į	į	ŧ	3	ځ	CABLY	ALPMA	
MACH BETA	5	ð	5		, se	Grade -	GEOCG.	.16290	-4.01000	
62G. 968.	-,20000	06230	0000	0.0000	- 52140	. De030	16705	.16450	-4.15000	
. 590 4.000	21150	2860	CE132.	0.690	-,93139	.11530	24319	.16970	-4.16000	
	20800	0.267	01022	20.50	CACAC	.14400	-,31349	1,180,20	-4.16000	
.998 8.150 GRACIENT	5.300	29000	72000-	00067	86900	3 6036	04121	60000	03446	
	ON NO.	21/ 0 6	RNL = 4.49		GRACIENT INTERVAL =	-5.99/	3.00			
				Ļ	ŧ	ž	ځ	CABLV	ALPHA	
MACH BETA	3	ę Ž	ঠ	i i	4	: :	(ALEXA)	22365	20065	
•	18300	.03570	.31220	3880.	04320	1729	2750	£925.	-4,05020	
	-,19100	54295	.30350	D6960.	.11554	3000	(Kee.	19840	COUNTY 7-	
	18900	.ne180	.29415	09880	.52145	3854	02890	.18460	-4,04000	
	-,20300	.05350	.28685	11.20	corp.	00000	10360	21912	-4,04000	
	-,20400	.nszsa.	.28955	.11030	-,010	1990		1820	000507	
	-,19900	04520	.29500	.11350	- 32480	20411.	06006	CONT	0.030.0-	
	-,19500	01220.	COTOE.	.11200	-,03380	14319	(3593° -	2252	-4,06000	
	2078:	.03650	.31150	.19735	54245	1735	10000	\$5 ster -	\$6000	
CRADIENT	-,56102	06000	.07022	.00178	00563	78420	17/10/1			
	FUN NO.	31/ 0	RN/L = 3.99		GRADIENT INTERVAL =	-5.007	5.00			
			į	ų	Ē	Š	Շ	CASEV	ALPHA	
MACH BETA	δ	7	<u>ا</u> خ	1000	03340	16100	36379	.25220	-4,11000	_
1,100 -8,200	0.3861	0.04800	,451C.	00000	74417	12230	.26920	.24532	-4,11000	_
1.100 -6.130	-,21475	:06460	.4441			(17967)	1,17360	C\$3630	-4.112ED	_
	-,23590	George .	. ee035	7 Page 2	011301	13860	07880	122 m	-4.15£2m	_
	-,23800	00690*	.44135	217.00	040.00°	06.90	15450	2:467	10000	_
	-,23720	.08810	.44530	22:22	01910-	Cosen	SECOND.		-4.19220	_
	23300	COISO.	.439951	.22722.	(1582)	0000	2000			. .
	22196	06690*	.44540	.22673	54170	13535	13818E			-
	GG\$02	.05250	.44950	.21740	-,55485	1390E	SE SE SE SE SE SE SE SE SE SE SE SE SE S	'	16757.	
CHACIENT	12000	201102	6,0000	.00280	0.0000 0.0000	55176	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			

The second secon

TABULATED SOURCE FORCE DATA-TABA

AMES 11-707 1A9 ORA + S3 + T9 EXTERNAL TANK

(4BM2:05)

(23 MAY 79)

\$ 8 OKBING = PARAMETRIC CATA 000°7 ALPHA = RUCCER = RUCCER = 28.5350 IN. .000 IN. .000 IN. 2007 2007 11 17 17 18 18 18 REFERENCE CATA 2,4210 53,FT. 39,6490 IN. 39,8490 IN.

SCALE II

-3.98020 -3.97020 -3.97020 -3.98020 -3.97202 -3.98000 -3.98000 -3.97000 CABLV
.22280
.21330
.21330
.21350
.19310
.19310
.19310
.193200
.221350 236200 27310 19110 19110 19110 1-19710 1-27980 1-27430 1-37430 GRADIENT INTERVAL = -5.00/ 5.00 CYN
-.15985
-.11780
-.104870
-.104870
.148970
.124970
.121070
.167920 CAF .22590 .23140 .23170 .23770 .24510 .24890 .24890 .24890 .24890 RIVE = 3.00 44470 44870 43990 43980 43980 43980 44605 CLM .DARTO .D3480 .D5280 .D7380 .D6880 .D6800 .D6800 .D6800 6/14 § ₹ CN - . 25:200 - . 21:500 - . 22:500 - . 22:500 - . 22:500 - . 22:500 - . 22:600 - . 22:600 - . 22:600 -6.113 -2.580 -2.580 4.119 6.189 8.213 9£TA -9.130 MACH 1.245 1.245 1.245 1.245 1.245 1.245

S	
116	

24 25 00 43 W		-ABULATED	-ABULATED SOURCE FORCE DATA-TABA	E CATA-1A9A						PACE 123	•
			4PES 11-7	4PES 11-757 1A9 ORA + S3 + T9 EXTERNAL TANS	3 67 + 88	CTERNAL TAN	4		(48)42:05	(11 MAY 73	-
		i						PAGAN	PAGAMETRIC DATA		
	THE THE PARTY OF T	•					AM M	11	-2.000 ORBINE		S
S 1 10 55	2.42:E \$3.FF.	11 11 25 11	SA. Carr IN.	ż			RUCCER	" "		u	Š
p	39,8490 IN.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	. N. 1995.	żż			SUCPLE	**	200:		
SCALE : 39.	39.5495. IN.	4									
			12/ 5 KR	FIVE = 3.97	GRACIENT	GRADIENT INTERVAL =	-5.93	20.30			
	`	}		i	y	ë	ž	Շ	CABLY	ALPHA	
Š.	BETA	Š	3. C	5	5	26090	-,12430	.28280	.18555	-2,10000	
ê6£.	060.0-	20070	00000	Oleco.	0000	3065	15160	01022	.17600	-2.13mm	
966.	-6.16F	- Decen	2522	CALLAC.	09890	32000	97719	.15950	.1667	-E. 1:a.	
998.	070.7	(4.08.00° -	1896.1	08062	06890	0660C*	03473	eno.	.16185	-2.191.5	
.599	700.5-	03.600	200	G6922.	MCC.	-,06190	.00350	02200	15551	-2.3.2.2.2.	
666.		Magn.	51085	09622	.06950	01330	.04520	59345	CHOOL.	Carrier 6	
66G:	×13×	Contract -	03 60 5	.22759	:06770	02330	3220	15760	139601	2	
665.		00000	02100	C2222.	.06487	-,03310	.10040	-, Z24E	1.67.5.	Contract of	
96c.	011.0	20.820	-,00460	.23580	.05560	-,54283	.13120	2862	10.00	67,000	
Ser.	GEACTENT	-,0069	ercor.	-,00031	\$2000	-,90541	11868	9666G*-	-0.53	5	
		9. 3).	B 6 /22	RN/L = 4.49		GRADIENT INTERVAL -	/96*5-	3.30			
•				i	į	Ę	ž	გ	CABLV	ALPIA	
Š	BE:A	8	g	ব	3	3		.36190	.21230	122010	
106.	. A	5,541.00	06483	.31000	139700	CIERC	13995	.2789£	.2020	-2.0700	
106	-6.130	001100	C8600"-	3002	00/60-	PAPET.	02765 -	.16929	£9161.	-2,0700	
106.	24.075	06800	01250	13462.	. 11.9.5	LE OLIC	04280	CCT60.	13000	-2, 17010	
106.	-2,030	07400	C#300	3552	2777	62.5	.05215	090017-	.17283	-2.970F	
£136°	2.070	-,51770	6600	Seese.	14844	02570	10300	19890	G1674.	50225-2-	
106.	4.127			00007°	11583	-,03650	.14220	23640	13456	-2.00	
106.	6.183	0.0270	1000111	CED A.E.	0.0001	54660	.17350	-,36640	20430	-2.5.5	
199.	9,230 68A01504	E6.300	1,00054	00084	.05133	63500*-	68620.	-,04665	- 15/216	1	
		9 8)	32/ S	RWL = 3.99		GRADIENT INTERVAL	180°5- =	3.00			
				,		ë	Š	Շ	CASLV	ALPHA	
MACH	BETA	Z	ว ี	5		15557	.15230	35350	.24380	-2.03000	
101.1	-8.210	-,05700	011390	0.00	21110	024420	118DO	.26295	23615	-2.53.50	
1.131	-6.147	0673B	10000	13384	0808	29750,	0.8950	.1722	.254Z3.	-2 C. C.	
101.1		A K の U -	1103.	3000	500	ವಿಕೆಕ್ಕಾಗಿ,	00000	10.140	.22.35	-2	
1.101	•	in Control	2772.7	CHUNA	23070	200010-	068907	15175	535	-2::2-	
1,191		Constant of	13.200		Control	CHURCH.	C7655.	.19755	S. N.	2	
61		CC890-	0.1430	24767	22955.	39770*-	132%		2:52		
\$. \$ £			, 18. C	24780	.21837	06.30*-	1.600 m	P. 37319	13622°	0 K 1 K 2 -	
101 · 1	92.8 F35.01	983.4		27.305.	60810	09714	.02058	04463	£ 2232	E1 ***	
	7,111153										

TABULATED SOUNCE FORCE DATA-1A9A 54 d35 ec 31vc

AMES \$2-TET

CLEANERS I INCOMES	PAKANETRIC DATA
TANK	
IAS CRA + SS + TS EXTERNA TANK	

= 29.5395 IN. et et et et	0.4 0.00300. 0.4100. 0.5200. 0.5200. 0.5600. 0.6800. 0.6800. 0.6800. 0.6800. 0.6800.
8 3	•

a takin a ita kan angantahan di mina di Bata da masa na ana ari di manandi minandiga da angantahan da da da da

CATE 28 SEF 73		TABULATE"	TABULATEP SOURCE FORCE BATA-1A9A	SATA-1A9A	i		_	5	(KB-COP)	C 21 WAY 75)	
			AMES 21-77	AMES 11-717 TAS CRA + 53 + TS EXIENTAL LAW	83 + 19 EX	P 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			;		
	1							FARAM	PARANETRIC SATA		
a r	REFERENCE DATA	<u>.</u>					i		ANTEN SEELING	41	
	3	11 13.38 14.38	28.530E IN.				Transfer of the second	1 \$ 1		920° = 8	
1689°68 = 448°		YMEF =	NI 10000.				FUELF	11	.000		
þ	190 IN.	= 4384Z	-N1 5000								
U	. MADE SCALE										
		GLN NO.	13, 9 FN/L	3.97	GRACIENT	GRACIENT INTERVAL =	-5.93/	S.35			
		•	;		J	ਵ	ž	Շ	CABLV	A.P.S.	
MAQ.	BETA	3	ř	5 2	94240	0977	-,12860	28373	1656	- 31556-	
166.	-6.100	.03200	55240	2002	08980	03435	15470	C2622.	. 1725	- 31150	
765.	-6.060	32600	- 545350 FEBRUARY	0.222	09090	02200	-,08600	.17415	Teast.	Catal	
165.	4,595	32150	130 m	52673	09995	36110.	54219	.08510	- 100 s		
166.	-2.515	2000	CONTRACT -	68922	G\$79G	95115	000T	Carrier -		.3193	
.597	2	OCCUPANT.	00250	.22490	09690*	01419	0.0550	126201	1924		
766.	060°	100.0	-,03800	G1622.	.07050	02485	26.50	- 2267	(1289:	31900	
.96.		GC916	54375	C2622.	0.190	raser"-	Carci.	66962-	17832	31(975)	
166.		GGZZ	0.54925	.23185	193380	CC 70	2000	Sector 1	00116	(1)	
766.	Selles Selles	-,02139	.00043	-,00003	.00112	965UG*-	556XC*	,			
				•		GEACIENT INTERVAL =	-5.007	5.30			
		RUN NO.	G /62	- 100				i	2 80	46	
		i	3	5	ጛ	턴	Z	ָר ב	1	25000	
+C#1	BETA	5	5	31220	.10160	£689£	18050	erre.	6.50	33333	
0.66	-8.185	00000	3 5	1366Z	15420	00190	14910	25.5	Contract.	31723	
DG6.	-6.149	91160	1988. T	23423	.11560	17277	100 P	1960	7.4.47		
D. 6.	100 T	22601	06530	28840	.11360	02210	- 5272	5,000	2,63.	10000	
006.	-2.535	03400	122250-1 178780-1	28610	.11679	00220	is not a	£553£	157.4.		
üdő.		12 20 EU	1 05487	28850	.1:720	0.8390	הבפשנו.	1000000		(A) (C) (C)	
£1.6°	2.07	1303617	14.99	28895	22.47	-,512750		- 19 A. P. C.			
[idi6*	4.123	Carrier of the Carrie	- 1567D	29755	22222.	U\$550 -	1437	00000000000000000000000000000000000000		Sich Fin	
0.6	6.173	(Alasan)	08980-	30700	110000	06890°-	17272	63640	2:::2	40000	
8	CRACIENT	-,00039	6000	950470"-	95000	98	6134517*	•			
		Ç.	5 / F	RN/L = 3.99		GRADIENT INTERVAL	700.8- =	8.			
		3				1	3	ځ	CABLV	Vite 1	
•	į	ð	å	ð	ل¥ ا	9		38048	23.3.8	Care and	
#3 5	200	0.04400	-,05650	£4795	216:2	Depart of	Grace -	2677	23833		
96.	-6.140	SECORD.	\$1650°-	E 1238	.2116.	600	Calcal I	Carrie 1	.22:E		
900	180.41	32825	G\$27.3"-	.4379	23.64	1000	[38 e].	: :32T	22.42	CARLES I	
	050.4-	ないなどい	±660°−	43990	25.	i king d		- 10613	35.23	F	
	2.075	02120	13920	C8687.	1346	W # # C	0.000		C	F	
5	4.147	1.26.E	(212.	. 241.A.	16:57	10470	2002	7.2911	15 m 2 m	6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6	
521.1	6.19	(1) (4) (1) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	G1997 1	. 665	, ,		CONTRACT.	1974	() #1 #1 #1		
ei •	£252	0.1276	1. 16 16 10 1	. Rest.		100	641201	629731-	## #1 #1 	f., 71	
i	SRATTENT	82.5		h Co Co	•						

TABULATED SCIECE FORCE DATA-1A9A

AMES 11-707 IAS ORA + S3 + T9 EXTERNAL TANY

EL ANN ES : (CESTAGE)

PAGANCTEIC BATA 8 8 8 ALPHA = RUCOSE = FUCE = GRASIENT INTERVAL = -5.00/ 5.00 43/ G ROVL = 3,00 28,5300 IN. .0000 IN. .0000 IN. 11 d362 2 d362 RUN NO. GEFERENCE BATA 2,4210 59,FT. 39,E490 IN. 39,E490 IN. SPEF = BREF = SCALE =

7.42. 2012. 2012. 2013. 2013. 2013. 2013. 2013. 2013. 2013. 272.0 272.0 19130 CON -.14960 -.11600 -.04900 -.04900 -.04900 -.14900 -. -5.007 GRACIENT INTERVAL 60. 20.000. 20 6. .45645. .446693 64144. 64460 6444. 64649. 71660. CLN -.061223 -.756223 -.758213 -.758313 -,04860 -,05400 -,05200 -,05400 -,05400 g /67 0.05000 .050000 .050000 .050000 .050000 .050000 .050000 .050000 .050000 RUN NO. -6.1101
-6.1101
-6.1101
-2.0302
-2.0302
-4.1000
-6.1303
-6.1303

> 1.249 1.249 1.249 1.249 1.249 1.249 1.249

CYN
-.16390
-.13240
-.09380
-.09380
-.00213 .05860 .05860 .04590 .03040 .02030 -.05800 -.05800 CAF .24780 .25120 .25480 .26130 .26830 .26830 .26830 00200 00200 00010 00010 00010 00010 00010 9£7A -6.170 -6.120 -4.960 1.395 1.395 1.395 1.395 1.395

* #

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N
6

CATE 28 SET 73		TABULATED	TABULATED SOURCE FORCE DATA-IA9A	E DATA-TAGA						
			AMES 11-7	AMES 11-777 IAS ORA + S3 + 79 EXTERNAL TANK	3 62 + 25	ITEENAL TAN	ĸ		(4 <u>5.00</u> 16)	C 22 TANK 73 3
•	CORPERINCE CATA	2						PASA	PARANETHIC GATA	
							2	1		
	2.4210 59.FT.	* 4 36 0	26.5300 IN.	ż				11	H 100 11 100	8000 日 四 四 四 四 四 四 四 四 四 四 四 四 四 四 四 四 四
þ	39.6495 IN.	11 HE	.000 UN.	ż			ŭ.		186.	
"	8495 IN.	1 11	10 Jane 18.	ż			}			
H	GREE SCALE									
		SUN NO.	14, G RN	RVL = 3.99		GRACIENT INTERVAL =	-5.96/	8.35 6.35		
				į	1	E	Ē	ඊ	3	767
£034	BETA	3	1 d	5 8	STATE OF THE PERSON NAMED IN	27775	1293	23.	366x : .	3.99.00
666.	180° 8	16155	TOWER.	14. X	55850	£369£	19801-	222.	10000	2.03000
. 599	180.	0000	EXPLANA -	22415	56650*	02820	- £1799£	::6635		1000000
.599		2000	Des et	25152	26673	31160	16070			Carried C
666.	1000 J	5000	14.50L	.22160	:36720	-,99149	J. 200		i de la companya de l	
960.	1300	idd.V.	F7960	CACAS.	:2690*	-,51500	Contra	- 272		100.00
£6.	Der •	14130	10086J	C#222.	1929U	02596	2673	-1315E	(A. 84.	200
666.	21.5	14405	-,15130	(2222)	10191	13850		- CC37-		39066 E
666.	111.0	1.9750	2252	:228ZZ.	0.65430	026975"-	1.562			60000
afic.	1010	21.21.0	28000	-,05016	District.	-,00625	518.21	90000	9	
		S S S S	图 5/72	RWL = 4.50		GRADIENT INTERVAL =	-5.007	50°5		
						ŧ	Š	Č	VIEW	15 P. 15
C	BETA	3	ð	ঠ	3	9	1	ELCSI.	100 X	2.05300
226	-0.183	18905	13470	15256	1120	Carrier of		R. O.	0.00	3,9970
	133	19600	12921	2367	.10595	316317	10 10 10 10 10 10 10 10 10 10 10 10 10 1	50,00	Carlo a	1 35.36
, E	160 4-	1,1890	12987	F2362	10900	12855	20 H 1	1000	17 k	(ME) (ME)
3 × ·	180	1989.20	12570	28543	.11460	.01160	116911			2
21.6.	E C	30221	12360	.28610	.11367	193630	17050	10 to 10 to		02.2.
21:6.		18700	-,12910	28920	.11150	1,02490		うめがい		Catalon &
9 66	() () () () () () () () () ()	17400	-,1238J	53565	11080	Set 45	777		CR. W. A.	
9 60	12.0	18000	1289	D8906.	10191	51255-)		\$ 5 AC .	G.L.
	CRACIENT	-, 1761:27	12332	£21433°-	e.	63966	66470	1	•	
		3) 3)	E 5 / 7 K	66°€ ± 7/N±		GRADIBAT INTERVAL #	1816	(E)		
		!				,	į	₹		ă,
7	BETA	ć	ð	გ	n An	4				2.200
10.1	-9.195	20761.	12640	.44335	20892	interior.	0.46.	17.476		2,5235
	4	50061°	12527	.44280	.2:73	Definition.	177			2 2000
	100	00291	-,12730	128835°	1227.	1919U	しからし			(5) (8)
10.101		20.00	12750	33465.	.2249£	D1540.	- 5.426	1000		4
101.1	מפט ל	12 60 4	- 1265	.43640	231157	C\$840*-	(T) en en			
161.	080.5		128630	. 262.77	22910	-,03540	190	in the second	History.	
1:1. T	1.130	12000	196.00	127.25	02612	Library 1	1225	2.5	- J - 23 - 4	
101 · 1	001.0	10 K 0	10.46.4	PROPERTY.	.214.10	05343	1865	Support -		• 6
101.1	8.Z3:	The state of	e mineral in	Land Control	20	のものとして「	96.55	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		h 1
	GRADIENT) 	:						

The second secon

	PARANETRIC CATA	ALPIA = 2.000 333145570 8.00158 = .200 2.2.6.0h = .200 8.001.8 = .200
AMES 11-TIT IAS CRA + 53 + TS EXTERNAL TANK		. NT 1920. LV NT 1920. LV NT 1920. LV.
		#EPPRENCE GAIA 2,4210 SQ.FT. YMEP = 39,6430 IN. ZMEF : .030C SCALE

	10000000000000000000000000000000000000
	7.00.00 2.00.0
9°50	27350 .27530 .16867 9947 16320 26510 35490
-5.00/	CON. - 11890 - 11800 -
INTERVAL =	19840 19890 19890 19890 19890 19890 19890 19890 19890 19990 19990
GEASTENT	CAF 24360 24750 25756 25560 25560 25700 25700 100022
ENCE = 3.00	44990 44990 44020 45750 43830 43810 72910 44850 70000
s /#	CLN - 12207 - 12287 - 12287 - 12287 - 12307 - 12507 - 12507 - 12507 - 12507
S. S.	200 2.19400 2.19400 2.19400 2.17500 2.17700 2.17700 2.17700 2.19100
	6.080 6.
	2. 246 1. 246 1. 246 1. 246 1. 246 1. 246

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		TABLESTE	SOURCE FORCE	TABULATED SOURCE FORCE SATA-1A9A							
			11 Sing	ANCS 11-777 149 ORA + S3 + T9 EXTERNAL TANK	53 + 79 EX	TERNAL TAN	J) (6 1.20 18)	1 11 MAY 73	•
	1	i						PAKAI	PAKANETRIC DATA		
	SEED SOUTH	* 1								•	Ş
	1.40 J. 50. T.	1.	23.5376 IN.	ż			ALPHA G. P. S.	øs ti	ACKET TABLES	1 [1	ê
		u u v	NI Side	ż			437¥	ı t'			
		4)442	÷ 6000	÷							
4.	CROW SCALE										
		SUN NO.	15, F 3	3.98 ± 1.95	GEADIENT	GRADIENT INTERVAL ?	-5.90/	8.00			
			:	i	**	ŧ	Š	Շ	CABLV	ALPHA	
F0#	ACTA	ટ	Š	4	200	.05140	13530	.30160	.17300	4.10000	
939	060.8-	.26237	16655)6412·	CALCAC.	03860	10800	00282.	.16740	4.10000	
864.	. 6. 060	.28300	16387	21812.	08880	01520	08461	.17140	::6077	4.11000	
966.	GE 4-	.277%	-13960	C69:2:	04090	.01230	04820	.09180.	134 E	4.11020	
865.	-2.010	.27350	1565	2000	0.000	00150	-,00780	CEOUT.	15300	4.11000	
966.	020	.27600	126761	0.013:	06:30	01570	06060*	97139	.15400	4,11920	
966.	2.050	.267.0	-,10450	21710	02850	02750	09690.	15200	.15890	4.10000	
366.	4,085	27.72		0.8.6	.05260	04160	.10360	05622*-	.16547	4.100.00	
₩66.	6.115	27300	-1015	2.4.0	0,4620	05270	.13320	30010	1799		
865.	e.150	2760	1000	90000	\$200	-,00657	.01911	n3994	-,00021		
	CRACIENI	66.33.	,			E WANDSHIE SECTION	-5.007	9.00			
		RUN NO.	25/ O RI	ENT 1 4.49	51085						
				į	44.0	Ē	Š	Շ	CABI V	ALPHA	
¥O¥.	B£TA	₹	1	۲ .	300	חקהפט	-,18030	37040	20700	3.97000	
OLIG.	-8.175	COSTS.	18900	Control	(A) (A)	00000	14340	.28260	.18770	3,98000	
006	-6.120	30400	18230	2883.	. society	CARACI	-,10160	19490	.18120	3.98000	
00.6	-4,080	CCSCC.	18490	£ 160	20277	C+240	CARAD -	:19460	.17540	3,980,10	
Citie.	-2,030	CON 62.	17810	.28670	11140	(9910 -	.05160	10060	.17190	4,13000	
Cici.	2.070	.29100	-,17490	15692.		03140	.10240	-,19820	.17660	4,13000	
X.6.	4.130	COSCS.	16302	31162	00/504	06440	07921.	28250	.19280	4,12220	
OKING.	6.180	37.400	1,4360		0.000	0.05610	.17360	-,36680	08502	4.12.30	
006.	8.240	SERVE.	. 1839.	20000	Service.	(2) 728	.02476	-,04783	-, 192162	.02193	
	CRACTENT	84543	in the second se		:						
		RUN NO.	æ ∴ /S€	RN/L = 4.00		GRADIENT INTERVAL :	= -5.007	5.05 5.05			
				į	940	ē	ν	Շ	CABLV	AL PHA	
MACM	BETA	ξ	ਕੂ ਹ	5	(A)	(629)	16170	37045	.22aen	4.07070	
1.103	-8.190	00277	13.304	1900CB.	100.00	0.6810	12400	.27400	.22150	4.080.70	
1.103	-6.140	0.000	Exteri-	.43380	10717		08320	.:8390	.21039	€.092900	
£.15.2	-4,080	2800	: 894J	43395	126.22.	THC 177	03940	08740	C7475	4.08000	
E STATE OF THE STA	-2,030	31970	8550	42824.	06622.	08240	04240	06660	.2::80	00000*4	
802° 8	2.080	.31800	18530	00007	24.250		.08140	18735	.21420	4.08000	
\$ 113	4.140	.31800	Centra	43370	12617	Casan	11600	27260	.21685	4,06000	
\$C.1° 1	6.200	Wall?	1712	. 42160	24.75	100000	.15580	36200	.2295ū	4,07000	
1,139	6.230	(1911)	1.1.229.1	C. S. S. S.	K F	- 171789	0.2220	-,04505	.00073	Konst.	
	CSACTENT	50 EGC -	Part of the	2.4	5		•				

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TABULATED SOURCE FORCE DATA-1A9A

(RBNZD9) (11 MAY 73)

986 ALPHA 4,14000 4,15000 4,15000 4,15000 4,15000 4,15000 OKBING = PARANETRIC CATA .20210 .19370 .17830 .18480 .18500 .18980 .19980 000. 000. .24720 .26390 .08770 -.17550 -.25940 -.34770 ALPHA = RUCCER = RUCCLR = 45/ D RW/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00 CYN -.14680 -.11480 .03660 .07590 .16660 .11480 AMES 11-707 1A9 CRA + 53 + 19 EXTERNAL TANK CBL .05860 .04490 .01500 -.01500 -.05019 -.06019 .24770 .24960 .25770 .25770 .25230 .25260 .24760 CA .44770 .44330 .43330 .43530 .43730 .44740 .00028 28,5300 IN. .0000 IN. .NI 0000. QLH -.18080 -.18020 -.17370 -.17320 -.17320 -.17320 RUN NO. CN 31600 32000 31000 31100 30700 30700 30900 XIARP XIARP REPERENCE DATA 2.4210 59.FT. 39.8490 IN. 39.8490 IN. PETA -0.150 -6.110 -2.020 2.070 4.110 6.160 6.160 G.210 1.246 1.246 1.246 1.246 1.246 1.246

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Column C				AMES 11-	FD7 1A9 CRA +	SS + 79 EX	TERNAL TAN	J		(KB)(219)	(11 MAY	r r
Secretary Secr		interest CA	*						PARA	NETRIC CAT	4	
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	•							ę,	11			950
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1,000 1,00	ŀ		ii dibak	0000	ż			100 H		000		
## CHANCE SETA CHANCE 16 / 0 BUL = 3.98 GADIBM INTERNAL = -3.00 / 5.00 ## CHANCE SETA CHANCE 12 C	ţı			0000	ž							
### NO. 16.7 RAVI = 3.98 GADIBNI INFIRMAL = -3.07, 5.00 -6.030	} 	DECORPTION SCALE										
### CA CA CA CA CA CA CA CA CA CA CA CA CA			RUN NO.			GRADIENT	INTERVAL =	-9.90/	3.00			
March Color Colo					i	7	Ē	ž	Շ	CABLV		_
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-2.00000400220110 .21990004900049000490104490	199.	040.6-	40000	-,22640	.21119	orrec.	00000		02862	.1673!	_	R
-4.030 .40720 -22730 .20350 -00130 -00130 -00130 .13170 .13180 .20400 .00330 -00130 -001300 .13180 .13180 .20400 .20350 -00130 -001300 -001300 .13180 .13180 .20400 .20350 -001300 -001300 -001300 .13180 .13180 .20400 .20350 .003500 -001300 -001300 .13180 .13180 .20400 .203500 .003500 .003500 .003500 .13180 .203500 .203500 .203500 .003500 .003500 .003500 .13180 .203500 .203	166.	-6.090	.45450	22013	.21090	.04330	0.100	61680	C9671.	J. 59 E.	_	£
-2.000 39900 -21360 20740 05570 -01350 -01350 13140 213140 2 -0315	40%	-4,039	COZUP.	21730	.27950	186 9 13	01/2/2	00.00	00410	35170	_	s
Color Colo	766	-2,000	39900	21360	.20740	.05570	03.00	50.00	01390	.15145	_	8
2.000 3990021160 .20660 .05240 .06360 .10360 .15520 .15680 .16860 .15990 .15680 .66400 .10640 .10	798	020	39400	21180	.20660	05550	-, octob	0000	- 177.40	.15180		8
6.130 39000 -21370 20890 104290 -104400 110540 -12000 110540 104290 -104400 110540 -12000 110540 -100144 -100110 100120 -100112 110540 -100144 -100110 100120 -100112 110540 -100144 -100110 100120 -100112 110540 -100144 -100110 100120 -100112 110540 -100144 -100110 100120 -100112 110540 -100144 -100110 100120 -100112 110540 -100144 -100110 100120 -100144 -100120 -100144 -10014 -100144 -10014 -100144 -10014 -100144 -10014 -100144 -10014 -100144 -10014 -10014	497	2,060	39300	21185	.20660	.05480	-,01680	10000	101.5	15660		8
6.130 39100 -21550 20890 104550 -105670 113780 -100036	404	Coli	39000	21370	.20890	.05230	G662G*-	COSOC.	CCCT-	16300	6.060	8
### CAPTION	166.		39100	21555	C0802	.04590	-,04400	1000	00202	5054	80.0	8
### CARDIDAT -,00148 .00044 -,00010 .00020 -,00712 .01946 -,140299	766.		00207	22450	.21160	.03860	05670	13782	-,30706		City -	8
CARLY CARL CARDENT INTERVAL = -5.007 5.00	160.	Marada	00148	44000	01000	02000	00712	.01946	DEC:341.			:
1.00 1.00			FUN NO.				INTERVAL :	-5.00/	5.00			
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-6.1101220022840 .29190 .10120 .1046901017019460 .11807019670 .		5	C2627	-,23853	30090	.10010	.06040	11801.	20000	E CO		8
-2.030	ķ ē	410	41200	C4822	.29190	.10120	.04635	14840	2000	ACC.		8
-2.030	5 . 6		4260	-,23300	.28750	.1960	02080	-,19170	19400	10000	_	: 8
2.070	ios.	20.0	42500	23120	.28590	07011.	.01360	04890	Control of	0.34.		: 8
4.130		20.5	42770	-,22822	.28540	01601.	00210	09060	1.66.1.	CARO.	_	8
6.290 .4210022690 .29460 .11032004690 .14300226620 .13130	106.	01000	41 6787	- 22840	.28600	.10230	03240	.10160	1960			
### CAPUTO22390 .30330 .109780105940 .1172037241 .20035 CAACIENT001320073500	106 F	000	20014	-,22690	23460	.10320	G697U*-	.14300	-,28620			.
CARCIDNT	106		00.00	23390	30330	09760.	05940	.17720	57245		•	9
BETA CN CLM CA CAF CBL CYN CY CABLV -0.177 .42590 -23270 .43760 .27360 .27360 .27500 .27500 .27500 -0.130 .41700 -22390 .42750 .27390 .13500 .17170 .38690 .27700 -0.130 .41700 -22390 .42750 .22420 .01370 08690 .18710 .27590 -2.020 .4140 .42700 .22420 .01370 03690 .18710 .27590 2.080 .4440 .22440 .22420 .01370 0360 .18240 .27590 4.140 .44500 23940 .2130 03490 18240 .21560 6.210 .44500 23940 .4310 .27990 05080 .21760 6.220 .44500 23940 .4310 .27990 23990 23990 6.220 .44300 23940 23940 05080 .167	1.6	CRACIENT	00132	950:00	00017	-,00052	-,00761	.02472	04764	CC William		ì
BETA CN CLM CA CAF CBL CYN CY CABLV -6.176 -6.176 -6.177 -1747 -1747 -1747 -1747 -22750 -22750 6 -6.136 -41700 -2275			RUN NO.		tı		I INTERVAL		5 ,93			
BETA CN CLM CA CAF CD -6.170 .42790 -23270 .43760 .21360 .11470 .12600 .27520 .22750 -6.130 .41700 22530 .42750 .21790 .14470 .27560 .27520 .22750 -2.020 .42750 .22420 .01370 .108690 .18710 .27250 -2.020 .42740 .22420 .01370 .04130 .108490 .27250 2.080 .4440 .22440 .22330 .01370 .10810 .18240 .21760 4.140 .4140 .22530 .42890 .21330 .03490 .18240 .21760 6.210 .44800 .23940 .43940 .21390 .12470 .27990 .22820 6.220 .44800 .23940 .43940 .21990 .22820 .22820 .22820 6.210 .44800 .23440 .21990 .16470 .27990 .22890 6.220 <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>ŧ</td> <td>2</td> <td>5</td> <td>CABLV</td> <td>A</td> <td>*</td>						1	ŧ	2	5	CABLV	A	*
6.13G .429G .22370 .4376G .2338G .1103G .1260D .2752G .2235G 6.13G .417G .2239G .4275G .2777D .1147D .1260D .2752G .2752G 7.02G .427G .224Z .033G .043G .1649G .2722G 2.06G .427G .223G .0137G .0413G .0649G .2722G 2.06G .444G .2213G .2139G .034G .1824G .215G 6.21G .445GG .2233G .213G .034GG .124G .227GG 6.21G .445GG .2234G .213G .034GG .124G .227GG 6.21G .445GG .223GG .213G .034GG .124G .227GG 6.22G .445GG .224GG .213GG .034GG .167GG .007GG .007GG	044	BETA	3	ğ	ర	3	רפור היינו		CECER			90
-6.13G .410002239G .4275G .20705 .14477G	1.106	-6.173	00624	23277	43060	2.380	2300	OLD C.	07870			8
-4.060 .4170022590 .42510 .22420 .0337003650 .06490 .22690 .22690 .22600 .0337003650 .06490 .22690 .22690 .22600 .22420 .0137001650 .04500 .22640 .22690 .2233001670 .0415008260 .21500 .0186008600 .21820 .21820 .2150005080 .1247028990 .22620	90.	-6.135	.41000	·22350	.42750	20202	1147 AU	09600	18715			90
-2.020 .4200022740 .42710 .22420 .0137000050	30.	-4.0eO	41700	J6\$22°-	.42510	.2159.	03050	GEOGG!	Coton			2
2.000 .4490024140 .43270 .2233001070 .14130 .10901. 4.140 .4040022030 .22890 .2113003490 .0016018240 .21760 6.210 .4450023940 .2099005080 .1247027990 .22820 6.210 .4430024170 .43110 .2012006470 .1678038220 .22990		020.5-	42000	22740	.42710	.22420	.01370	2000127-	0.900			50
4.140 .4040722030 .42890 .2113003490 .0816018240 .22420 .22420 .4140 .4140 .23940 .22420 .22420 .22990 .4310 .2099005080 .1678038220 .22890 .43900 .43900 .24170 .43110 .2012006470 .0202004490 .00113	1,100	Car	CONT	24140	.43270	.22330	01970	126130	379613*+			2
4.140 .4450023940 .43410 .2099005080 .1247027990 .22890 .45210 .4450028940 .23940 .2012006470 .1678038220 .22990 .22990 .22990 .4430024170 .43110 .2012006470 .00790 .16202004470 .00113	901.1	0000	40400	22030		.21130	03490	.08160	1824:			, <u>1</u>
6.210 .4430024170 .43110 .2012006470 .1678038220 .225999	1.106	4.140	000			223990		.12470	27990			0 9
#2280 - 12020 - 12020 - 12020 - 12020 - 12020 - 12020 - 12020 - 12020 - 12020 - 12020 - 12020 - 12020 - 12020 - 12020 - 1202000 - 120200 - 120200 - 120200 - 120200 - 120200 - 120200 - 1202000 - 120200 - 120200 - 120200 - 120200 - 120200 - 120200 - 1202000 - 120200 - 120200 - 120200 - 120200 - 120200 - 120200 - 1202000 - 120200 - 120200 - 120200 - 120200 - 120200 - 120200 - 12020	1.106	6.210	00000		43110	20120	06470	.16780	38220			
	1.106	W.285)	3.6		7954.00	67000-	00790	<u>02020.</u>	-,04479			

TABLLATED SOURCE FORCE DATA-1A9A

(11 MAY 73) PARAMETRIC CATA (REME19) AMES 11-707 1A9 CRA + 53 + 19 EXTERNAL TANK

8 8 ALPHA 6.03000 6.03000 6.05000 6.05000 6.03000 6.03000 6.03000 OKBING = CABLV .19740 .18900 .18440 .17680 .18110 .18410 .20120 6.995 6.995 6.965 CY
34940
26000
17800
08770
-18880
-18980
-259900
-34670 ALPHA = RUDGER = RUDFLR = GRADIENT INTERVAL = -5.00/ 5.00 CCN
-.14720
-.11430
-.07870
-.037810
.03410
.07110
.11640
.14530 CBL .05970 .04530 .04530 .01570 -.01740 -.03160 -.06040 -.06000 CAF .24820 .25270 .25160 .25970 .24950 .24950 .24950 .24950 46/ n RN/L = 3.01 44590 44090 43600 43600 43600 43460 43990 43990 43990 28.5399 IN. .0000 IN. .0000 IN. QLM -.23680 -.2350 -.2340 -.2340 -.23100 -.22750 -.23230 RUN NO. CN ,43600 ,44000 ,44600 .44170 .43300 .42700 .42900 -.00152 714RF 234RF REFERENCE DATA 2,4213 50.FT. 39,6430 IN. 39,6490 IN. 96.1A -6.130 -6.080 -2.080 2.070 2.070 6.160 6.280 GRADIENT 1.246 1.246 1.246 1.246 1.246 1.246 1.246 SCALE : DREF SAEF

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20 00 000		TABULATED	TABILLATED SOURCE FORCE DATA-1A9A	E SATA-1A9A						PAGE 133	•
			AMES 11-7	AMES 11-707 1A9 ORA + 53 + 19 EXTERNAL TANK	53 + 79 Ex	ITERNAL TAN	¥		(FB4211)	C 11 MAY 73	•
ì		;						PAR	PARAMETRIC DATA		
ti.	GEFERENCE CAIA	4					á	1	A. nor. SKBINC	H	906
4 4	2.4213 Sa.FT.	- 456%	28.5390 IN.	ž				, (682
,	.N. 1946. 65	= JANA	.NI OCCC.	ž							
1.	19.6490 IN.	2766F ==	.NI 0000.	ż			3				
•	DISON SCALE										
				,	TATI FAT	CEARIFM INTERVAL =	-5.00/	5.00			
		RUN NO.	177 D EN	KN/L = A.I.C.							
,	į	ē	3	ð	Ç	턴	ž	Շ	CABLV	ALP A	
FAST.	GE.1A	5	2020	19620	.02650	09660.	13670	.30260	2 1		
66 5.	000	00000	- 2773	19990	.03670	.04460	10260	C88.22	1632	30000	
66£.	66.34	COLUMN TO STATE OF THE STATE OF	27430	19890	:04870	CT 650.	06830	14960	01061	02.00.0	
666.	010.0	Constant	7695	06961	.04050	00810	535,80	.06720	.15442	0.0000	
	- C	2010	28690	30761	.04570	-,50150	01200	00810	25151.		
6 6.		***	26720	19550	.04360	01750	.02360	06249	26161.	Contract of	
66n	3000		26485	02761.	02000	-,02460	.04240	10270	19761	00000	
665		0001	CBUTS	02761	.03830	03120	.06140	14080	1000		
66°.	4.100	00000	27410	19630	.03460	-,04659	.10050	22370	.1617	0.577.50	
666.	6.1%	00126	03000	10.20	.02460	06070	.13540	30290	.17230	CARDLE OF	
. 599	9.180	. 524(1)	0.50.0°	enter.	(Sec.)		.01552	-,03519	.00082	3	
	GRACIENT	8 17 2						1			
		RUN NO.	27/ D R0	RN/L = 4.50		GRACIENT INTERVAL =	-5.00/	8°63			
			;	į	745	é	Š	Շ	CABLV	ALPHA	
* O*	DETA	ξ	5	5	00830	16.50 L	18220	.37460		7,9700	
DEG.	-8.130	.53900	28540	. con	C8660	07270	14310	.28319	.19219	7,99000	
0.6	G60*9-	. 53300	27740	2000	00000	Contract Con	00960	.19280	.18335	7,99000	
ui6.	-4.060	32900	27290	.2887.	.10543	200	04540	.09290	.17785	7,94000	
006*	-2.020	. 527.30	26950	C8752.	Coes.	0.750	04680	06260	.17485	0.00000	
ouc.	2.080	.53100	27120	2886	11360	COLUMN TO THE PERSON TO THE PE	0.0962	18990	18300	12 C. T. W. W. W.	
8	4.149	. 52900	27336	.2882.	.1050	04940	13810	28020	.19230	9°08330	
uis.	6.230	. 53/2/2	27630	10.362	1305.	01690-	.17430	36835	GE602*	6.03000	
7.6.	6.270	.54100	285.P	(3000)	0.000	282.40	.02325	04635	**: (Kings *	.91464	
	CRACIENT	CECCO.	(N. N. 1. 7	02223		!					
		RUN ND.	37/ O R	RN1 = 4,00		GRADIENT INTERVAL:	-5.00/	5.00			
			;	;	572	ē	ž	Շ	CABLV	ALPHA	
₩.	BETA	3	ð	5	3	16677	16320	.36500	22710	7,99200	
1,103	-0.140	47000	24160	36909	orier.	04240	- 13450	.28940	.21860	6,05000	
1,103	-6.110	.54600	27750	.42670	CIMIZ.	00760	ניסכסנו	19857		9°56115	
1,103	-4.970	.54900	27610	.42460	2313	00400	0.000	G99 6G		B. C. C. C.	
1,193	-2.020	. 55400	28150	.42410	.2172.	02010.	0.00	1,1967		G. S. 65. 17. 17.	
601.	2.090	.55100	28040	.42300	.26920	00810	00000	C\$200 -		6.0800	
1.103	4.150	.54200	27550	.42520	.20290	-,53630	CRASC.	28570		0.05000	
1.103	6.230	. 55700	28400	.42619	.1991:	0.6260	16740	- 3835D		8,04000	
1,173	6.300	. 56500	-,2935Ω	.42600	19410	G#2900-	(226)	514744		40.20.	
· •	CRACIENT	-,000.03	.0001	10000	00:17	00 Ping.					

TABULATED SCURCE FORCE DATA-1A9A

		006°		_ RRRRRRRR
	₹.	ORBING =		ALPHA 7.97000 7.99700 8.07070 8.07070 8.07070 7.997070 7.97070
(KBWZ11)	PARANETRIC DATA	900.000. 1000. 1000.		CABLV .19690 .16990 .16390 .17560 .18360 .18920 .18920 .19850
•	PARA	43 87 81	9.00	CY ,34860 ,26150 ,17360 ,08610 -,07630 -,16370 -,25000 -,34430
		ALPWA RICOER RICOLR	-5.00/	CYN145500756007600 .0610 .0610 .10190 .14115
DRNAL TAN			GRADIENT INTERVAL =	CBL .06030 .04560 .03060 .01625 01830 04620 06170
23 + T9 EXT			GRADIENT	24260 24450 24450 24450 25640 24730 24660 24660 24660 24660
AMES 11-707 IA9 CRA + S3 + T9 EXTERNAL TAN'		żżż	₹N/L = 3.01	44190 .44190 .43690 .43280 .43280 .43280 .44070
AMES 11-7		26.8300 IN. .0000 IN. .0000 IN.	E 0 /29	
		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	SI NO.	CN .99800 .98800 .96400 .95400 .59400 .59900 .59900
		ACFERENCE DATA 2.4210 58.FT. 39.8490 IN. 39.8490 IN.	COSING SCALE	BETA -6.100 -6.070 -4.040 -2.060 2.060 6.160 6.240
		a n p		MACH 1,245 1,245 1,245 1,245 1,245 1,245 1,245
		5	SCALE =	

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CATA-1A9
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(KBMZ1E) 1 .1	: CATA	OKBINC = ELEVON =	
(ABPLEX	FARANCTRIC DATA	000°9- 000°5-	
		ALPHA = RUCCER = RUCCER =	
INES 1-717 IAS ORA + SS + TS EXTERNAL TANK		7. F. F. F. F. F. F. F. F. F. F. F. F. F.	

906.			
#1 B1		-8.07020 -8.05000 -8.05000 -6.11000 -6.11000	ALPHA -8.110203 -7.990203 -7.990203 -8.0110203
-6,000 ORBING -5,000 ELEVON		CABLV .27160 .25600 .24300 .24470 00272	CABLV ,23570 ,22590 ,21460 ,21460 ,21590 ,21590
11 11 1)	9. .00	CY .39230 .19200 13600 42140 05140	CY .37460 .18660 01140 20310 39680
ALPHA RUDSER RUSFLR	-5.997		
	GRADIENT INTERVAL =	CBL .04630 .02310 00530 03140 05460	GRADIENT INTEKVAL = -3.097 24
	GRADIENT	CAF 117869 118699 120969 120989 120250 170283	GRADIENT CAF .20650 .21250 .222740 .226740
	40.E = 17.89	C4 .44740 .44200 .44340 .44720 .00011	RNL = 2.99 CA CA .44220 .43240 .43250 .44220
28,5300 IN. .0000 IN. .0000 IN.	ND: 0 /26	4,0 16810 16810 16905. 02605. 17720	CAN C /201 CAN
	NO.	47500 90500 52200 51900 48700	CON NO. 48900 51000 51000 51000
2.421f \$3.4T. 39.8493 1N. 39.8499 1N. .0390 SCALE		967.4 -6.170 -4.573 .020 4.160 6.370	9ETA -6.120 -4.030 .020 4.130
5 90 90 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1.103 1.103 1.103 1.103 1.103	M OH OH OH OH OH OH OH OH OH OH OH OH OH

TABULATED SOURCE FORCE DATA-1A9A

AMES 11-707 IA9 CRA + 53 + 79 EXTERNAL TANK

(RBM213) (11 MAY 73)

	PARAMETRIC CATA	
ť		

PARANETRIC CATA	-5.000 CESTAG = .5000		CY CABLY ALPHA .37660 .26760 -6.615000 .18670 .23760 -6.12500 .01810 .23750 -6.12500 .21250 .22570 -6.13700 .40280 .24.00 -6.14000		CY CABLY ALPHA , 35480 .22730 -6,15000 ,16140 .21690 -6,15000 ,01570 .21690 -6,12000 ,20300 .20100 -6,17000 ,20300 .20100 -6,17000
	RUCCES = RUCSTR =	L = -5,007 5,00	CYN - 16390 - 18430 - 11530 - 11550 - 12520	L = -5.00/ 5.00	CYN -,15020 -,07820 ,01330 ,09750 -,17470
		GRADIENT INTERVAL =	CAF CBL .18510 .04610 .19200 .02290 .20950	GRACIENT INTERVAL =	CAF CBL21780 .04890 .22250 .02500 .2224000450 .2233003200 .2363005660
	26.5300 IN. .0000 IN.	118/ D RN/L = 3.99	CA. 12020 .45270 13960 .44260 13480 .44700 14270 .44360 11100 .44760	111/ 0 EN/L = 3.02	CLM CA .10310 .44510 .13020 .44140 .14160 .44080 .13220 .43980
4	2047 2047 11 987 11 987	NO.	CN -,36600 -,37100 -,39000 -,37800 -,34300 -,04300	RUN NO.	ON 35720 36720 36736 37162
GEFERENCE CATA	SHEF = 2,42:0 59.FT. LREF = 39.8490 IN. SKREF = 39.8490 IN. SKALE = .0300 SKALE		HACH BETA 1.102 -6.180 1.102 -4.080 1.102 -4.140 1.102 4.140 1.102 6.280 PARADIENT		1,245 -8,130 1,245 -4,060 1,245 -4,060 1,245 -4,060

137	r r		8 8			
PACE	(11 WAY 75	•	GENTA = ELEVON =		APA 4.1500 4.150	4,1900 4,1900 4,1900 4,1900 4,1900 10,100
	(RBWZ14)	PARANETRIC CATA	-4.000 OGBINC -5.000 ELEWOR .000		CABLV .25240 .25467 .22540 .23490 .23490 .23490	22160 22160 22160 72162 72162 72160 7160
		PAR	ALPHA = RUDSER = RUDFLR =	5.90	CY .35420 .17570 -,10830 -,18210 -,18210 -,14586	.17520 .17520 01130 20130 37850
	*		₹ B B		· 1 1	. 14270 17270 191559 . 19770 . 16673
	XTERNAL TAI			GRADIENT INTERVAL = -5.00/	.19719	.02510 .02510 0240 03340 05830
	3 67 + 52 -					CAF .22590 .23220 .24920 .24940 .24140
TABULATED SOURCE FORCE DATA-1A9A	AMES 11-707 149 OPA + 53 + T9 EXTERNAL TANK		żżż	FN/L = 3.99	CA .44950 .44100 .44340 .43750 .44690 00043	C4 .4470 .44160 .44240 .44720
SOURCE FOR	AMES 11-		28.5300 IN. .0000 IN.	ŭ /86	0.18 .04560 .08040 .09440 .09050 .05340 .00001	0.04 0.04930 0.04930 0.07930 0.07460 0.07460
TABULATED		474	11 12 12 12 12 12 12 12 12 12 12 12 12 1	RUN NO.	ON19200 29000 24600 23100 20320 01012	ON -,20100 -,22870 -,22770 -,24970 -,17101,1
		GEFERENCE BATA	2.4210 59.FT. 39.8490 IN. 39.6490 IN.		BETA -8.190 -4.190 -4.190 8.260	BETA -8.140 -4.060 .020 4.110 8.210
CATE 28 SEF 73			SREF = 39, LNEF = 39, SCALE = 39,		1,798 1,798 1,798 1,798 1,798	1,290 1,290 1,290 1,290 1,290

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(KB)-(215 MAY 75)	CATA
	CACAMETRIC CATA
AMES 11-707 IAS CRA + S3 + T9 EXTERNAL TANK	

8					
	el ff		2.05000 -2.05000 -2.05000 -2.06000 -2.42000 -2.00122		ALPPA -2,06000 -2,05000 -2,06000 -2,06000
	-2,900 OKBINC -5,900 ELEVON		CABLV .24460 .22950 .21950 .21170 .29020		CABLV .21630 .27680 .19430 .19190 .27213
	8 H H	3.93	CY .34695 .16760 01660 20390 38120	5.00	CY .33780 .17439 01390 19659 36890
	ALPA RUDDE RUDDE	-5.00/	CTN 14830 07210 .01180 .09780 .16790	-5.90/	CYN1382007530 .01010 .09320 .15980
		GRASIENT INTERVAL =	CBL .05370 .02630 02490 03510 06110	GRADIENT INTERVAL =	CBL .05170 .02650 00440 03400 06000
		GRACIENT	CAF .20380 .21230 .22170 .23170 .21850	GRADIENT	CAF .23220 .23970 .25020 .24630 .100153
		ENL = 3.99	CA .49060 .44180 .44380 .44380 .44880	RNAL = 3.01	CA .45060 .44650 .44400 .44840 .470031
	28,5390 IN. .0000 IN. .0000 IN.	117/ D EN	-, meso -, mes	112/ D RN	ALP - 05100. - 05100. - 05000. - 05000.
*	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AUN NO.	CN -,06200 -,18600 -,13300 -,09400 -,09500 -,09500	FUN NO.	ON 07400 08000 69300 06900 06900
ACPERENCE SATA	2.4215 53.FT. 39.8493 IN. 39.9495 IN.	DSTR SCALE	BETA -8.190 -4.080 .030 4.140 6.290		26.130 -4.130 -4.070 .020 4.119 6.200
ď	1 1 1 2 2 2 2 2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4	SCALE =	¥ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		MO+ 1,245 1,245 1,245 1,245 1,249

6 9 1	, M		8 8		
7	CT TANK 22 1		и н Ч Ж		221.00" - 000011
	(4Br216)	PAGANETRIC BATA	# 1000 0000 # 1000 0000 # 1000 0000		CABLY 22360 22360 22360 22360 22360 22360 22360 23600
	ਦ	PASANE	"	9:00	CY 38020 1.0550 01130 20130 04692 CY 3.09 CY 3.3895 01260 19550 19550 26560
	J		ALPAA RUDDEN RUDDEN	-5.99/	CYN1517008290 .09370 .1640 .16401518613850238502840
	ITERIAL TAY			GRACIENT INTERVAL =	AF COL. 2134005740 2134005740 2234005330 2234005330 2234005330 2234005330 2240005330 2240005300 2240005300 2240005300 2240005300 2240005300
	53 + 79 E)				
CATA-1ABA	AMES 11-757 1A9 ORA + 53 + 19 EXTERIML TAME		* * *	RN/L = 3.99	CA .44790 .44820 .44830 .00022 RWL = 3.00 GA .44830 .44830 .44830 .44830 .44830 .44830 .44830
TABULATED SOURCE FORCE DATA-1ABA	ANES 11-7		26,537% IN. .0000 IN. .0000 IN.	NB 0 /66	QLM -,03800 -,04320 -,04340 -,05400 -,05500 -,05150 -,04490 -,03160 -,04160 -,04160
TABULATED S		2	7.550 7.570 7.570 7.570	RUN NO.	CN 103600 103600 103600 103600 103600 103600 103600 103600 103600 103600 103600 103600 103600
		REPERBICE CATA	2,4210 53,FT. 19,8490 IN. 19,8490 IN. .0100 5 1.2		8ETA -8.210 -4.090 .027 4.130 8.230 GACIENT -8.190 .020 64.110 8.200
CATE 28 SEF TS		2	.		1.099 1.099 1.099 1.099 1.099 1.247 1.247 1.247
CATE			S. C. C. C. C. C. C. C. C. C. C. C. C. C.		

	(REPORT 1 1 1 1447 75 7	Parantiric Cata	2000 0000 0 0000 0 0000 0 0 0 0 0 0 0 0		(7 CABL) ALPHA 39910 22320 E.IERRO 17790 21577 E.IERRO -00970 21620 E.IERRO -18960 21620 E.IERRO -18660 21620 E.IERRO -18660 21620 E.IERRO -18660 -18600 -18600	£	CY CARLY ALFMA .33530 .2090 2.15778 .17380 .19570 2.17778 .19560 .18550 2.18777 .18520 .18780 2.17777 .49570 2.0007 2.17777 .997800007
			555	-5.05/ 5.48	CYN 14897 15897 19976 19976 15977	-5.97/ 5.99	CYN 13849 07710 .05720 .08870 .15443
	TERNAL TAIL			CAASIENT INTERVAL =	CB. .03840 .02973 .90400 .93610 0540	GRACIENT INTERVAL =	CBL .05390 .02690 00410 03340 06200
	55 + 79			GASTENT	CAF ,21110 ,22360 ,22750 ,22360 ,21260	GRACIENT	CAF .24130 .24590 .25030 .25210 .24860
CATA-1A94	AMES 11-707 1A9 ORA + S3 + T9 ""TERIAL TAIN			RN/L = 3.99	CA .44400 .43240 .43240 .43770 .44250	EN/L = 3.91	C4 .45995 .43960 .43661 .43120 .45120
TABULATED SCURCE FORCE DATA-1A9A	ANES 23-75		26,5900 IN. .0000 IN.	116/ S RN	-12359 -12259 -11875 -12145 -12445	113/ D EN	QLM 1218D 1187D 1750 11700
TABULATED :		ž	1	FUN NO.	CN .19100 .19100 .18600 .18700 .19100	RUN NO.	ON .19000 .18600 .17500 .16500
		REFERENCE DATA	2.4210 53.FT. 39.8496 IN. 39.8495 IN.		-6.200 -4.090 .n25 4.120 6.240		9ETA -9.140 -4.060 .020 4.100 8.200 GRADIENT
CATE 28 SEP 73		tr	9AEF 7 2.4 LACF 7 39.6 BAEF 7 39.6		1,102 1,102 1,102 1,102 1,102		1.244 1.244 1.244 1.244 1.244

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CATA-1A9	
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TABLEATED SOURCE FORCE	
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AMES 11-707 1A9 CRA + S AUES 11-707 1A9 CRA + S AUED 5A3.FT. WHF = 28.5300 IN. AUGU IN. YMFF = 10000 IN. AUGU IN. ZMFF = 10000 IN. AUGU IN. ZMFF = 3.96 AUGU IN. ZMFF = 3.96 AUGU IN. AUGU IN. BETA CN CA CA -6.200 -32500 -18930 -43900 -4.190 -31500 -18920 -33800 AUGU IN. AUGU IN. BETA CN CA BETA CN CA -1.8010 -43870 -33800 AUGU IN. BETA CN CA -1.8010 -43870 -43870 -1.8010 -1.8010 -43870 -1.8010 -1.8010 -43870 -1.8010 -1.8010 -43870 -1.8010 -1.8010 -43870 -1.8010 -1.8010 -43870 -1.8010 -1.8010 -4370 -1.8010 -1.8010 -4370 -1.8010 -1.8010 -1.8010 -1.8010 -1.8010 -1.8010	NK (13 WA 75)	PAKAKETTIC ZATA	ALPHA = 4,000 OESIME = .300 ELDOSR = -5,000 ELDOSR = .000 ELDOSR = .000	CAN 15699 	CYS CY CABLY ALPHA -,14100 ,34390 ,25480 4,08000 -,91190 ,17139 ,18400 4,08000 ,91190 -,07619 ,18500 4,08000
### ### ##############################	S3 + T9 EXTERNAL TA			CAF CBL	00 00 00 00 00 00 00 00 00 00 00 00 00
#215 \$3.FT. \$26F = 8490 IN. \$76F = 8490 IN. \$76F = 8490 IN. \$76F = 8490 IN. \$76F = 84,200 -3,200 -4,100 IN. \$1900 -4,000 -3,1100 -4,000 -4,100 IN.	AMES 11-707 1A9 OEA *		.NI 0000. .NI 0000. .NI 0000.	FN/L = CA CA CA CA CA CA CA CA	ឧភព
#215 59.F #215 59.F #4.089 1N. #4.189 1N. #4.189 4.139 #4.139 8.280 #4.136 6.146		4			
	JATE 20 SEF 73	REFERENCE DAT	2,4215 59.FT. 39,6490 IN. 39,6497 IN.	MACH BETA 1,111 -6,200 1,101 -4,060 1,101 ,020 1,101 4,190 1,101 8,260 GRADIENT	60 1 1

(ASSESS) I TO MAT

SECTOR : PARANETRIC DATA 600 st ALPHA = FUENCER = FUENCER = GRADIENT INTERVAL = -5.00/ 5.00 AMES 11-757 1A9 ORA + S3 + T9 EXTERNAL TANK 115/ D RN/L = 3.99 28,5300 IN. .0000 IN. .0000 IN. FUN NO. 1.45.P REFERENCE SATA 2.4215 53.FT. 39.6490 IN. 39.6490 IN.

SAEF LAEF BREF SCALE:

	C 11 144	ATA	OCBINC = ELEVON =		ALPHA
	(KB)(220)	PARAMETRIC BATA	6.000 000.8-		> 20 × 2
			ALPIA = RUCCER = RUCC	-5.00/ 5.00	2
	5 + T9 EXTERNAL TANK			GRADIENT INTERVAL =	į
A6A1-A1A	AMES 1:-707 IA9 CRA + S3 + T9 EXTERNAL TANK		28,5305 IN. CCCC IN. CCCC IN.	FUN NO. 1917 IN RIVIL = 3.96 GRADIENT INTERVAL = -5.007 5.00	
TABULATED SC.		GEFERENCE BATA		RUN NO. 15	
CATE 20 SE0 73			SEEF 7 2.4215 SQ.FT. LEEF 7 39.8490 IN. SMET 8 39.8490 IN. SCALE 8 .0300 SCALE		

	4,644 6,0200 6,0200 6,52000 6,52000 6,52000 -,52100		AMPLA 6.00000 7.9000 7.9000 8.90000 8.50000
	CAB.V .22630 .21316 .20890 .22280 .23140		CABLV .27255 .18725 .18710 .19830 00006
	CY ,36220 ,19720 -,19690 -,36940 -,36940	9.00	. 34360 . 34360 . 16960 17050 35100
	CYN 16890 09290 .00150 .09460 .17420	-5.00/	CYN1393007020 .00260 .07410 .12700
CACIEN INICAN	.06460 .03250 03850 03850 07140	GRACIENT INTERVAL = -5.00/	CBL .03600 .02780 03480 05700
SEACHEN!	CAF .20170 .215900 .215500 .20440 .19315	GRACIENT	CAF ,23920 ,24560 ,24370 ,23990
35.5 " J.NE	CA .42805 .42815 .42375 .42755 .42459	RNL = 2.99	44170 .44170 .43320 .43280 .43880 .43880
	CLM 29450 28050 28120 29300	0 /901	28960 28240 28360 28380 27770
FUN NO. 1917 ?	.36900 .36700 .55700 .54800 .56400	RUN NO.	A .56000 .56000 .56100 .55100
	BETA -6.190 -4.060 .025 4.160 6.300		-6.100 -4.040 -4.040 -4.120 7.210
	1,099 1,099 1,099 1,099		1.246 1.246 1.246 1.246 1.246

(KBN221) (11 WAY 75)

FARANETRIC DATA WES 11-707 1A9 GRA + S5 + T9 EXTERNAL TANK

	E 8		
	0 0 9 %	APPA -6.11000 -6.10000 -6.00000 -6.00000 -7.00000	APAA 4.13000 1.6.13000 1.6.03000 1.6.03000 1.6.03000
FARAMETRIC CATA	TOO BLEWIN =	CABLV .26635 .25745 .24765 .23439 .24557	CABLV .23270 .223270 .223270 .214690 .21470 .21470
TAK T		5.00 CY .38450 -,03119 -,43500 -,15019	5.00 CY .36090 .17690 -,176160 -,41060
	ALPHA RUSSER RUSPUR	-5.00/ CYN CYN 16340 07600 .11830 .11830 .20551	-5.00/ CYN 14670 07090 .10780 .19720
		GRADIBNT INTERVAL = AF CBL 193504290 1958019500 1958003480 2058003480 2058003480	GRADIENT INTERVAL = LAF CBL 220960 .04270 221320 .01900 22234000930 22260003530 22260003710
		GRADIBNT CAF1935019587276897275867	GRADIENT CAF .20980 .21320 .22340 .22770 .22860
	żżż	CA CA .44980 .44390 .44890 .44320 .44320 .49360 00001	CA .44250 .43800 .43800 .43580
	26.5359 IN. .0566 IN.	CLM 1.6840 1.920 2.1920 2.1320 1.7600	69 0 70 60 CLM CLM .16660 .19550 .20300 .19910
Ę.		ON ON ON ON ON ON ON ON ON ON ON ON ON O	CN ON4690051900523005000005000050000500005000050000500005000050000
OFFERENCE DATA	2.42:5 59.F7. 39.8499 IN. 39.8499 IN.	9ETA -6.179 -4.060 .020 4.150 8.300 GRADIENT	9ETA -6.120 -4.030 .120 6.130 6.250
ò	LEF = 2.4 UREF = 39.8 BREF = 39.8	1.156 1.156 1.156 1.156 1.156	1,245 1,245 1,245 1,245 1,245

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(21 MAY 73)

(KBNZZZ)

PARANETRIC DATA

-ABULATED SOURCE FORCE DATA-1A9A

DATE 28 SEF 73

REFERENCE CATA

AMES 11-737 1A9 ORA + S3 + T9 EXTERNAL TANK

OKBINC = -6.000 -10.000 -10.000 ALPHA = FUDER = FUDFLR = 26,5300 IN. .0000 IN. .0000 IN. и 6 и 2,4215 59,FT. 39,8490 IN. 39,8490 IN. LAST BAST SCALE ti K

ALPNA -6. DADOD -6. DSDDD -6. DSDDD -6. DSDDD -6. DSDDD -1. DDJ122 CABLV .22580 .21640 .21860 .21860 .21800 .21800 25630 225090 22570 22580 22280 22380 23380 . 36070 . 17220 - 02930 - 22210 - 41460 8.00 GRADIBNI INTERVAL = -5.00/ 5.00 CYN
-.15130
-.07210
.02590
.11500
.19230 -5.00/ GRACIONT INTERVAL CBL .04900 .01930 -.09900 -.08060 -.06064 .18923 .19380 .21990 00112. 3.99 RN/L = 3.01 . 44475 . 44475 . 44180 . 45100 . . 55100 RN/L = 12470 .13890 .15390 .14130 02000 .11220 61 / 19 0 2 RUN NO. -.34100 RUN NO. -,32600 -.38405 -.37200 -.00073 8.287 4.140 BETA -0.190 -4.000 8 1.099 1.099 1.099 1.099

.34690 .17371 -.72410 -.21360 -.39870 CYN -.14300 -.06890 .02220 .10880 .18370 .08130 .02130 .02130 ..03610 ..08060 ..07002 CAF .21860 .22440 .23340 .23370 .23370 .44340 .44200 .44200 .44670 .74670 Q_M .1960 .12839 .13510 .13510 .11980 -.36000 -.35700 -,34320 -.37290 3 BETA -0.140 -4.060 1.249 1.249 1.249 1.249 1.249

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TABULATED SOURCE FORCE DATA-1A9A CATE 28 SEF 73

8 8 (11 MAY 75) CRBING = PARAMETRIC CATA (KBMZZ4) -2,900 -10,000 ALPHA = RICCYER = RICCYER = GRADIENT INTERVAL = -5.00/ 5.00 A-ES 11-777 1A9 CPA + S3 + T9 EXTERNAL TANK RNL = 3.99 28,5300 IN. .0000 IN. .0000 IN. 63/39 u=u=0RUN NO. FEFERENCE BATA 2.4215 59.FT. 39.8490 IN. 39.8495 IN.

ALPHA
-2.09000
-2.09000
-1.99000
-2.00000 ALPUA -2.03020 -2.02000 -2.03000 -2.03020 -.00122 24410 .23100 .21980 .21980 .23230 .33220 .16360 -.20680 -.37680 .33960 .15910 -.02620 -.21000 -.39010 5.00 CYN
-,13630
-,06310
,02160
,110560
,17760 CYN -,13200 -,06600 ,10360 ,16750 -5.00/ GRACIENT INTERVAL CBL .04870 .02250 -.03800 -.06050 CBL .04960 .02240 -.03810 -.0520 CAF .23470 .23950 .25530 .24730 CAF .20620 .21100 .22120 .23140 .21830 RN/L = 3.01 .45020 .44210 .44190 .45070 ..55070 CA .44930 .44580 .44680 .45040 00000 Д.М -.00880 .01340 .02750 .50200 0.00000. 0.00000. 0.1170. .01510 0 /2 FUN NO. -, nenno -, nenno -, nezon -, nezon -, ne499 -, 19190 -, 99990 ON -,97499 ON -,56198 -,97399 5,000 -6.150 -4.070 4.100 6.200 .039 4.139 8.299 GRADIENT BETA -6.230 -4.593

SCALE 10 mm

1.248 1.248 1.248 1.248

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8 8 OKBING = ELEWIN = PARAMETRIC DATA 000. 000.01-000. ALPHA = RUCSER = RUCFLR = 4MES 11-707 IA9 ORA + 55 + 19 EXTERNAL TITE .NI 0000. .NI 0000. AESTRENCE DATA 2.4215 53.FT. 19.8490 IN. 19.8490 IN.

> BAEF = SAEF :

ALPHA .06000 .06000 ..31000 ..00000 ..00000 ALPHA -.31000 .31000 CABLV .18830 .20140 CABLV .23930 .22420 .21550 .21000 .21000 .21000 CY -.20510 -.37130 CY .34330 .16520 -.02630 -.21110 -.38960 -.04578 5.00 GRADIENT INTERVAL = -5.00/ 5.00 CYN
-.14030
-.06800
.02150
.10510
.17400 CYN .10349 .16460 .00000 GRADIENT INTERVAL = -5.05/ CBL .05260 .02470 -.04040 -.04040 -.06830 CBL -.03650 -.06400 CAF .20780 .21490 .22390 .23590 .21740 CAF .257700 .259220 .990900 86. RN/L = 3.01 CA .4453D .4517D .0000D CA .44710 .43930 .44090 .45090 64/ 5 RNL = Q_M -,03890 -,04250 ,00000 Q.M -.06310 -.04380 -.04000 -.06490 .00119 0 /84 ON .02800 .02600 .00000 SC NO. ON .06890. .0220. .02400. .06890. .06890. RUN NO. 9ETA -0.275 -4.090 -1.20 4.135 6.250 GRADIENT 9ETA 4.100 8.200 GRADIENT 1.248 1.098 1.098 1.098 1.098

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¥	(11 HAY 73		•1	**		ALP4A 2,04000 2,05000 2,05000 2,11000 2,11000 2,05000 2,01000 2,14000
	(KB)226) (PARANETRIC DATA	SHEBS CEBING			CABLV 21340 21340 21240 21240 21240 21090 19320 19320 19320 19320 19330 21090 21090
		FARAN	•		3.00	CY .39100 .17720 -,02020 -,19630 -,04639 CY .33990 -,11670 -,19670 -,19670 -,19670 -,19670
			:	RUSCON.	-5.99/	CYN14220075200752010280170905.00/ CYN CYN CYN135600754007540075400754007540
	TERNAL TAN				GRADIENT INTERVAL =	AF CBL 22910 .05630 22230 .02660 .22230 .02660 .22230 .02600 .22630 .02600 .21630 .03260 .24690 .03260 .24630 .03260 .24630 .03260 .24630 .03260
	S3 + T9 EX				GRADIENT	CAF .20910 .22230 .22230 .222690 .21630 .00031 GRACIENT CAF .24990 .24690 .24690 .24690
: DATA-1A94	AMES 11-757 IA9 32A + S3 + T9 EXTERNAL TANK				4N/L - 3,99	CA4400043760437604369044670079134514045140451804
TABULATED SOUFCE FORCE DATA-1A9A	APES 11-7			28,5300 IN. .X00 IN. .C00 IN.	N.5 ∪ 149	CLM1237012310121101227012270122701228011580115801158011580
TABULATED			1 4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FUN NO.	ON .199500 .199500 .199500 199500 199500 ON NO. ON .169500 16
			GEFEFENCE DATA		.0306 SCALE	65.74 -4.090 -4.090 -4.130 6.230 64.130 64.130 -4.000 -4.000 64.100
K 325 55 355	5 136 H 3145		Ù	7567 = 2,4215 Lagy = 39,8495 Bagy = 39,8495	SCALE #	MAC- 1.099 1.099 1.099 1.099 1.099 1.247 1.247 1.247 1.247

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TABULATED SOURCE FORCE DATA-1A9A

C 21 MAT 73

		98. 99.				
11 MAY 11				8,99000 4,00000 4,10000 4,13000		4.03000 4.03000 5.95000 4.09000 4.09000
(ABACET) (II MAT 73	PAKAMETRIC DATA	. 2005 - 2483 N.C. =		CABLY .23119 .21500 .21540 .21540 .21540 .21540		CABLV .20550 .16250 .16250 .16230 .20380 .20380
ĸ	PAKAME	ч б	5.95	CY .35539 .17070 -,01960 -,20050 -,37970 -,04516	8.00	CY .3364D .1642D 1942D 3657D
		ALPHA RUDSER RUSPLE	-8.05/	CYN1469006880 .01720 .19680 .1790	-5.00/	CYN1333006490 .01650 .03550 .16100
TERNAL JAN			GEADIENT INTERVAL =	CBL .05660 .02520 00800 04010 07020	GRADIENT INTERVAL =	CBL .05330 .02390 03880 03880 03660
53 + T9 EX			GEADIENT	CAF .21780 .22520 .22875 .22150 .21540	GEADIENT	CAF .24250 .24890 .25440 .25280 .24600
AMES 11-727 1A9 ORA + S3 + T9 EXTERNAL .AM.		2 2 2	96.€ = JVF	43890 .43820 .43070 .43700 .43840	RNL = 3.51	44600 .43840 .43370 .44010 .46990
AMES 11-7		28.5300 IN. .0000 IN.	€ 6 /99	CLM 17915 18435 18915 1815 18055	75/ D RB	ALM -17800 -17800 -17800 -17800 -178001
	•	7. 486 E E E E E E E E E E E E E E E E E E E	RUN NO.	CN .31300 .32300 .32700 .31900 .31700 .31700	RUN NO.	CN .30605. .31705. .30705. .30505. .30505.
		2.4217 S4.FT. 39.6497 IN. 39.6497 IN.		967.4 -6,200 -4,090 .023 4,190 6,260 GRADIENT		-8.140 -4.060 -2.060 -2.020 -2.115 9.210 GRAGIENT
		Stef = 29 Little = 39 SCALE = 39		1.101 1.101 1.101 1.101 1.101		1.246 1.246 1.246 1.246 1.246

FOECE BATA-1A9A
SOURCE
TABULATED
r
CATE 20 SEF 73
CATE

- AMES 11-707 1A9 CRA + SS + T9 EXTERNAL TANK

(12 MAY 75)

	906				
	" " W K		ALPUA 6.09020 6.07000 5.95000 6.11000 01580		ALP44 6.01000 5.99000 6.19000 6.19000
PARANETRIC CATA	D CEBING D ELEVON D		CABLV .22659 .21149 .21769 .23769 .23469		.20259 .18775 .17959 .16730 .27419 .27419
PAGANET	6.000 R = -10.000 R = .000	9.00	.35710 .16359 01270 19759 36990	3. 90	CY .33320 .16560 01260 16090 36370
	ALPNA RLESSER RUSFLR		CYN 15410 07920 .01210 .09610 .18020	-5.99/	CYN 13200 06540 .01390 .08370 .16120
		GRADIENT INTERVAL = -5.00/	CBL .05460 .02690 .00710 04030 07220	GRACIENT INTERVAL =	CB. .05390 .02490 03900 0560
		GRACI ENT	CAF223002236022360199401994019940	GRACIENT	CAF .24280 .29030 .28620 .24150 .24180
		RN/L = 4.90	64 43560 43400 42720 427900 433900	RN/L = 3.01	44549 43790 43780 43340 44590 -,00055
	28,5350 IN. 2000 I'd. 3000 IN.	677 S RNJ	0.74 23845 23625 23739 22745 23860	76/ S RN	CLM 22980 23150 22970 22930 22890
_ ≤	1 6 4 4 4 4 5 4 4 4 4 4 4 4 4 4 4 4 4 4 4	FUN NO.	CN .44100 .44300 .42100 .42100 .44200	RUN NO.	CN .43900 .43900 .41300 .42600
CFFEENCE CATA	2.4219 50.FT. 39.e499 IN. 39.8499 IN.		BETA -0.190 -4.060 .020 4.140 6.270		967A -8.130 -4.030 .010 4.120 8.220
ŭ			1,099 1,099 1,099 1,099 1,099		1,248 1,248 1,246 1,246 1,248
	SKEF LEFF BREF SCALE				

TABULATED SUIFCE FORCE DATA-1A9A

SATE 28 SEG 73

AMES 11-707 1A9 02A + S3 + T9 EXTERMAL TANE

ET THE 22 3 (627)as)

PASANETRIC EATA

6 8 8 8 ALPHA 6.05046 7.95040 6.15000 6.11000 7,99000 6,51000 8,50000 6,10000 ALPHA B.SIDRO 190121 0:81MC = 28.23. 28.23. 28.23. 28.23. 28.23. 28.23. 28.23. 8,000 -11,000 CT .33545 .16075 -.16375 -.36020 38840.-.18720 .18720 -.21010 ALPHA = AUCOEP = AUCO 8.9 8 CYN
-.13149
-.06200
.01270
.08530
.15590 CYN -.15980 -.08340 .06850 .16550 .16550 GRADIENT INTERVAL = -5.05/ -5.00/ GRADIENT INTERVAL = CBL .05510 .02450 -.06810 -.06830 -.06830 CBL .96130 .02910 -.02590 -.04320 -.07520 -.04820 .20127 .21627 .21959 .21959 .20619 .19239 CAF .24150 .24860 .25240 .24490 .23860 .00046 FN/L = 3.99 EN/L = 3.51 44250 .43450 .43490 .43420 .44260 42650 42910 42720 -00019 CA .42960 .43070 28.5355 IN. . PRIO IN. . OPER IN. .28620 -.28160 -.28170 -.27550 -.28190 61000.-CLM -.29165 -.27815 -.28390 -.2797E ₽ 136 0 /11 RUN NO. ON .55800 .56100 .55000 .55000 .55100 n ti 11 04 .56400 .55300 .55400 .56400 FUR NO. GEFERENCE SATA 2.421G 59.F?. 39.649G IN. 39.849G IN. BETA -9.166 -4.070 8.150 8.300 GRAZIENT 9ETA -6.100 -4.540 4.150 8.290 GRADIEM 1.246 1.246 1.246 1.246 1.246 1.096 1.096 1.098 1.098 1.098 SAFF :: LACF :: BSDF :: SCALE ::

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(AEM235) (11 my 75) AMES 11-727 1A9 OPA + \$3 + T9 EXTENDAL TANK

	ន្តន				
	H H		4.000 4.000 6.000		A.P.44 -7.94200 -8.120200 -8.120200 -8.120200 -9.120200
PARANETRIC CATA	-6.000 OXEDO -15,000 ELEVON .COM		CABLY .27400 .23673 .24527 .24467 .24467		CABLV .23759 .22759 .21469 .21419 .21419 .21712 .21
W&Va	6 11 11	5.05	. 23736 . 17775 	5.99	CY .33920 .166301. -,722630. -,41730.
	ALPIA FUESE FUESE:	-5.007	CYN 15820 06940 .02937 .12470 .21270	-5.95/	CYN 14389 06200 .17278; .11779 .19719;
		GRADIENT INTERVAL =	084 .04040 .01460 01100 05200 05200	GRACIENT INTERVAL =	CBL .0.40310 .01640 01110 03780 06060
		GRADIENT	.18199 .18199 .29389 .2939 .20669	GRACIENT	CAF .21625 .21625 .22695 .23175 .23095
	in. In.	RWL = 4.03	CA ,43900 ,44670 ,44610 ,43150 -,05707	RN/L = 3.90	.44370 .44370 .44370 .44360 .44360
	28.5300 IN. .0000 IN. .7007 IN.	78/ n R	2017.60 .21160 .21160 .21160 .21760	88/ S R	4.0 2.19693 2.19475 2.19930 2.19930 4.19930
•		S NO.	-, 47605 -, 47605 -, 5257 -, 52105 -, 46705	ON NOS	
ATAC BOCE CATA	2,4215 53,67. 19,6490 1N. 19,4490 1N. 19,770 SCALE		907.4 -4.160 -2.160 -4.160 0.110 GRADIDY		9674 -6.130 -4.090 -2.130 -6.130 GRADIENT
	SAEF = 29.		1.191 1.191 1.191 1.191 1.191		1.244 1.244 1.244 1.244 1.244

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4.60

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TABULATED SOURCE FORCE DATA-IASA

AMES 11-777 1A9 CRA + S3 + TS EXTERNAL TANK

PASAMETER CATA

. 20 EE 3 :5000E

25. 354ª

6.800 m 85.25 86.85 * 550° GRADIENT INTERVAL = -5,557 5,00 28,5350 IN. .0000 IN. .0000 IN. REPERENCE BATA 2,4215 59,67. 39,6495 1h. 39,6495 1h. COSTO SCALE

SCALE SCALE

18888. 18888. 18888. 19888. -. 548**23** -.423ED -. 14465 -. 15625 .124 5 .20105 .02311 C2250* 92190 92190 92190 92190 92190 92190 92190 92190 92190 92190 92190 .19000 .19000 .21150 .225067 .22360 . * \$ 430 . 4 5745 C4745 20492 115492 115492 11560 11560 11560 11560 11560 11560 11560 5 /**2** ON -,32500 -,36900 -,37600 -,37600 SUN NO. 9574 -2.195 -4.795 -1.267 -2.287 -2.287 -2.287 # 1.09.1 1.09.1 1.09.1 1.09.1 1.09.1

RNYL = 3.99

Crh. 113760 -05130 102900 11560 11560 12590 -5.00. GRADIENT INTERVAL RN7 = 2.99 308 NO. -. 900.65

.0423-0 .01820 .01120 .03930 .03930 .00000 .21930 .21930 .22637 .23540 .24170 .24030 CA .44810 .4440 .44670 .45130 .003128 08 -,34270 -,36400 -,37200 -,36400 -,06990 26.130 -0.130 -0.130 -0.220 -0.220 -0.220 1.235 1.235 1.235 1.235 1.235 1.235

6.5

-6.07770 -6.07770 5.0855

28.25. 28.25. 28.25. 28.25. 28.25. 28.25. 28.25.

. 34440 . 16330 . . 225040 . . 24691

A. 1 TOTO -6.12000

-6.09490 -6.09490 -6.09490 -6.09490

25.55 C28.55 PHA -8. DECEM -6. OSTRO

CATE 28 SEP 73		TABLA ATED	TABLE ATED SOURCE FORCE CATA-1A9A	CATA-1A9A						•	
			AMES 11-TOP IA9 CRA + _3 + T9 EXTERNAL TANK	tas cea .	X3 61 + 17	PENAL TANK		E	(62-632)	E 12 E 2	0
tr.	egrerence data	174						PAEAM	PARAMETRIC CATA		
Section 1 2.4213 Legin 1 39.6490 BREF 1 39.6490 SCALE 1 0307	2,42:3 \$3.FT. 39.e493 TN. 39.e495 TV. .0307 SCALE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.N1 (990); .N1 (990); .N1 (990);				ALPHA FLESTE FLESTE	17	- MCGEO 2007		22
		RUN NO.	85/ 3 RWL =	86°E	CRACIENT	GRACIENT INTERVAL =	-5.99/ 5	5.00			
#00 100 110 100 111 100 111 100 111 100 111 110 111 110 111 11	9ETA -8.275 -4.090 .020 4.135 GRADIENT	CN 19795 28390 24900 29705 00097		C4 -45390 -44290 -44290 -42590 -50000 - 50000	CAF .23123 .231335 .21723 .22723 .21635 .17284 GRADIENT	20120 174475 20120 174475 20120 101720 21720 -101720 21650 -106660 21650 -106660 CRISSE 10052	CYN 13870 .10890 .11760 .11760 .02170	CT .34270 .15890 53170 47290 94807	742 642 642 642 642 642 642 642 642 642 6		
1,249 1,249 1,249 1,249 1,249	6.138 6.139 7.080 7.080 7.080 7.080 8.113 8.113	O 2.800 - 2.800 - 2.800 - 2.800 - 2.800 - 2.800	Q_H .03590 .05729 .06705 .07670 .065301	.4520 .44910 .44740 .44660 .45310	22870 .22870 .23870 .24870 .24870 .24870	.0437 .0437 .04865 .04100 .05390 .05319	CONS	CY .35900 .16310 02910 39110	CCST. .22392. .22460. .1970. .22693.	4.15.00 4.15.0	

(48K233) (11 MAY 73)

gan's		8 . 88.				
(11 MAY 73		41 H		ALPHA -2. 19000 -2. 01000 -2. 01000 -2. 01000 -2. 01000 -2. 02000		ALP4A -2.13000 -2.1000 -2.1000 -2.0100
(RBM233) (PARAMETRIC DATA	O GEING E		CABLV .24430 .23010 .22050 .21150 01226		.21590 .21590 .20720 .19720 .19420 .20350
S.	PARAMET	ALPHA = -2,000 RICCER = -15,000 RICFLR = ,000	3.90	CY .33470 .15490 21600 39700 14536	8.00	CY .32349 .15789 12789 38489
		ALPHA RUDDE FREDE	/0G*S-	CYN -,13380 -,05900 ,02610 ,11400 ,18530	-5.00/	CYN 1238U 0594U .0256U .1154U .1754U
PERMAL TATE			GRADIENT INTERVAL =	CBL .94739 .02060 91979 04209 56904	GRADIENT INTERVAL =	CBL .04590 .01990 01090 06670
53 + T9 EX			GRACIENT	CAF .21390 .22300 .23415 .22255		CAF .23680 .24210 .25120 .25590 .25160
AMES 11-707 IA9 ORA + S3 + T9 EXTERNAL THE		<i>i i i</i>	RN/L = 3.98	CA .4532D .4440D .4435D .4556D .4556D	SUL = 2.99	CA .45260 .44930 .44840 .45010 .45000
AMES 21-7		28,5300 IN. .0200 IN. .0000 IN.	61/ U RN	0.18 - 0.6470 - 0.1360 - 0.1360 - 0.1360 - 0.0000	91/0 8	0.M 20140 20100 20200 20200 201670 20000 20000
		1. A SEE THE S	NO.	CN -, n6400 -, 09200 -, 09200 -, 07300 -, 07300	FUN NO.	CN 07500 08100 09100 08500 0123
		#EFFENCE DATA 2.42:0 \$0.FT. 39.8490 IN. 39.8490 IN.		BETA -8.200 -4.090 .020 4.130 6.250 GRADIENT		BETA -e.190 -4.060 0.20 4.100 6.200
		SHEF = 2.4 LICE = 39.6 BREF = 39.6 SCALE = .3		1.099 1.099 1.099 1.099 1.099		1.248 1.248 1.248 1.248 1.249

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TABULATED SOURCE FORCE CATA-IA9A CATE 28 SEP 79

AMES 11-707 1A9 OEA + S3 + T9 EXTERNAL TANK

(AB)(254) (11 HAY 73

PARAMETRIC CATA

FACE 157

8 6 OKBINC = 926. -15.939 ALPHA = RUCCR = RUCPLR = 82/ n RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00 26.5350 IN. .0000 IN. .0000 IN. 118.P REPERENCE CATA 2.4210 59.FT. 39.6495 IN. 39.8497 IN. .0387 SCALE

> SCALE 10 to

ALPHA
-, 392999
-, 392999
-, 392999
-, 392999 ALPAA -,3100%--,31000 -,31000 -,31000,-CABLY .24140 .22460 .21330 .21570 .23230 -.50172 21360 .21360 .22339 .19240 .18790 .25490 .33660 .16360 -.03130 -.21970 -.39860 CY .32470 .16290 -.02670 -.38260 -.04604 5.00 CYN
-.13360
-.06340
.02690
.11340
.18430 CYN
-.12460
-.06340
.02420
.10880
.17330 -5.95/ GRADIENT INTERVAL .04620 .02020 .02020 .-04180 .-06850 .-06850 CBL .04990 .02330 -.91199 -.94429 -.07160 -.99821 .23940 .24190 .25370 .25880 .25080 .00207 CAF .21900 .21900 .22820 .23310 .22220 .20172 RVL = 3.00 CA .4390 .44390 .44370 .45450 -.00002 CA .45320 .44540 .4:610 .44670 .45570 .00016 G /26 CN .03080. .03280. .03280. .03980. .03980. RUN NO. ON .03400. .0250. .01710. .0250. .02800. RUN NO. 4.110 8.195 GRACIENT 9£7A -6.200 9£7A -9.160 -4.070 Ŝ -4.090 1.097 1.097 1.097 1.097 1.097 1.249 1.249 1.249 1.249 1.249

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(RBM235) (21 MAY 73)

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TABLLATED SOURCE FORCE DATA-1A9A

AMES 11-707 1A9 ORA + S9 + 19 EXTERNIL TAN

PARANETRIC DATA

86.		
н II У Х	ALPHA 2, 0 10 00 2, 0 20 00 1, 9 60 00 2, 0 9 00 2, 0 9 00 2, 0 9 00 2, 0 9 00 2, 0 9 00	ALPHA 2.05000 2.05000 2.15000 2.15000 .01716
. tree orbine = . tree course. . tree	CABLV .23370 .215970 .215970 .221570 .	CABLV .21100 .19100 .18560 .19090 .20360
11 n n n 11 s	5.00 CY .34520 .17310 21220 36560 04667	CY .33370 .16450 02249 20990 37819
ALPHA RUDDER RUDFLE	-5.00/ -13690 -13690 -10000 -10000 -11600 -17630 -5.00/	CYN1297006380 .02220 .10840 .17170
	CRADIENT INTERVAL = LAF CBL 22230 .05390 22320 .02550 2252004470 2166007360 .077670.4854 GRADIENT INTERVAL =	CBL .0.4930 .0.2030 0.1080 0.4160 0.6920
	CAF .21230 .22380 .22380 .22380 .22580 .21660 .21660 .21660	CAF .24170 .25260 .25470 .25240 .000118
żżż	CA .44600 .44210 .43710 .44070 .44070 .4407006017	CA .45275 .44375 .44575 .45675 .00016
28,5390 IN. .0000; .NI 0700;	CLM 12275 11990 11990 11990 12150 .00107	-11690 -11990 -11390 -11390 -11250
* X X X X X X X X X X X X X X X X X X X	CON NO 19400 20000 19400 19400 19400 19400	NO 20881. 20821. 20821. 20481.
2,4210 53.FT. 39.8497 1N. 39.8497 1N. 39.8497 5N.	8ETA -6.210 -4.090 -2.030 4.135 6.230 6.230	8ETA - 4.150 - 4.060 - 5.021 - 4.100 - 6.214
2.45 = 2.4 C.C.C. = 39.6 S.C.C. = 39.6	1,102 1,102 1,102 1,102 1,102 1,102	11.248 11.248 11.248 11.248

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	(11 MAY 73		# # W Z		ALPHA 4.09000 5.97000 5.97000 4.11000 4.110000 4.110000 4.110000 4.110000
	(RBM236) (IIC CATA	OCEDIAC =		CABLV
		PARAMETRIC DATA	A = 4,000 ER = -15,000 LR = .000	9.30	CY .39310 .1660002900296403964004586 CY .39399 .16349020601967037149
			ALPHA GUCCER GUCFLR	-3.99/	CYN -1.14429 -1.05390 -1.05390 -1.17810 -1.12713 -1.12713 -1.12713 -1.12713 -1.12713
	TEGNAL TANK			GRADIENT INTERVAL =	AF GBL 221170 .03515 22190 .02370 22390 -09990 22390 -19400 21340 -19400 644010M INTERVAL = AF GBL 24460 .05919 25190 .02160 25190 .02160 25360 -19440 254810 -194000
	\$5 + 79 EX			CRADIENT	CAF .21170 .22590 .22590 .22590 .22590 .21540 .21540 .24480 .25190 .25190 .25190 .25380
CATA-EASA	AMES 11-777 1A9 ORA + \$3 + T9 EXTERNAL TANK			RN/L = 3.98	CA .4090 .4360 .43400 .44210 .44210 .00016 . .44210 .4420 .4420 .4520 .4520
TABLEATER SOUNCE FORCE DATA-LASA	ANCE 22-77		28.5300 IN. .0000 IN. .0000 IN.	84/ 5 RN	CLM18125318825318185521818553177353177353177353177353177353
TABLEATER		7.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RUN NO.	CN
		REFERENCE DATA	2,4213 58.FT. 39,6493 IN. 39,8493 IN.		85.190 -4.190 -4.190 -4.190 -4.190 -4.110 -6.110 -6.210
CATE 2" SEP 7"		ir	is it to the		MACH 1.100 1.120 1.120 1.120 1.248 1.248 1.248 1.248
SATE			SACT POST POST SCALL		

TABULATED SOURCE FORCE DATA-1A9A

AMES 11-757 IA9 ORA + S3 + T9 EXTERNAL TANK
PARAMETRIC DATA

	# # U 2		ALP44 6. 042020 6. 062220 6. 052720 6. 0422020 021122		ALP+A 6.05020 6.06020 5.99020 6.15020 6.14000
PARAMETRIC DOLD	30 G61MC = 20 G70 G70 G70 G70 G70 G70 G70 G70 G70 G7		CABLV .22760 .21000 .22520 .23270		CABLV .27230 .18697 .18930 .18930 .20450
FAKANT	ALPHA = 6.000 RUCCER = -15.000 RUCFLR = .000	3.00	CY .36290 .16100 01780 20930 39680	5.00	.33080 .15710 01910 19670 37149
	35 25	-9.00/	CYN1502007640 .01730 .10600 .16910	-5.00/	CYN1272005740 .05730 .09670 .16796
		GRADIENT INTERVAL =	084 .05500 .05500 .00500 .0500 .0500	GRADIENT INTERVAL = -5.00/	CBL .05080 .72120 01100 04170 07070
			CAF .21249 .22499 .22499 .21349 .23419 .29419		CAF .24510 .25230 .25820 .25040 .24560
	ž ž ž	EN/L = 3.98	CA .44900 .43900 .43360 .43660 00017	RN/L = 2.99	44740 .43920 .43970 .43910 .65010
	Ze.5300 IN. .redo IN. .reno IN.	85/ D RN	Q.M -, 23749 -, 23399 -, 23399 -, 23339 -, 23339	95/ û RA	0.04 - 23040 - 22860 - 22860 - 22860 - 22860 - 22860
14	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	RUN NO.	CN .44300 .44000 .44800 .43300 .43500	RUN NO.	0.43900427004
REFERENCE BATA	2,4210 S9,FT. 39,6490 IN. 39,8490 IN. 5330 SCALE		BETA -8.180 -4.180 .010 4.140 6.270 GRADIENT		9674 -6.130 -4.050 -0.050 -4.150 6.253
	SAUT = 2. LEEF = 39. BAUE = 39.				1.247 1.247 1.247 1.247 1.247

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ABULATED SOURCE FORCE DATA-1A9A
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			6	
•	t .		g. g.	
¥ Ž	(32 PAY 73			ALPHA 7.97000 7.99000 7.99000 6.19000 6.19000 6.09000 6.120000 6.120000 6.120000 6.120000
	(33	_	¥ 8	್ ಕಿಕಿಕಿಕಿಗಳ 1 ಕಿ ಕಿ ಕೆ ಹಿ ಹಿ ಹಿ ಹಿ
	6	CAT	OFBT WC ELEVON	CABLY 22720 2.27200 2.
	(FBICESS)	PATAMETRIC BATA	6.900 15.000	3 4 4 4 4 4 4 4
		РАЗЛАН	6.000 -15.000 -15.000	38888 3883 5
		_	""" 8	CY 18580 18580 19580 19580 19580 19580 19580 19580 19580 19580 19580 19580 19580 19580 19580 19580 19580 19580 19580
			RUCSER = RUSTUR = RUSTUR = V/ 5.00	•
				CCN15440060590 .01370 .11280 .12890 .02352 -5.097 CN128901633016330
	TANK		4	॥ ବର୍ଷ୍ୟର୍ବର ୫. ଗ୍ରୁଷ୍ଟ ହୁର
	TETNAL		GACIENT INTERVAL =	CAF CBL. -205890 .058390 -21740 .02760 -2192908830 -1965908830 -1965908830 -1965908830 -1965908830 -196590830 -10110409370 -24370 .05240 -2444001120 -2414007130
	e e) BAT	8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	* 73		3	CAF 22389 221740 221920 221740 219292 219292 219292 219292 224740
464	2A +		3,97	8
ATA-T	149 C			อังหัวเมื่อ ทั้งสังเมื่อ
SCE C	Ŕ		TN.	विद्यार्थका ॥ विद्यार्थका ॥
TABULATED SOURCE FORCE DATA-1A9A	AMES 11-777 IAS OZA + S3 + T9 EXTERNAL TANK		22.5355 IN. .0000 IN. .0000 IN.	ធ្នាធ្នាធ្នាធ្នាធ្នាធ្នាធ្នាធ្នាធ្នាធ្នា
3				•
TABULAT		₹.	1 436 M	ON NO. 58500 58500 58500 58600 58600 00 NO. ON NO. ON SECTION ON S
		SEFERENCE CATA	<u>;</u>	8ETA -8.170 -4.500 8.300 6.3500 GRACIENT BETA -8.110 -4.045 6.135 8.245 GRACIENT
		Š	2,4215 S3,FT. 9,8490 IN. 9,8490 IN. ,5350 SCALE	82.29 92.170 9.50 9.300 9.300 9.300 9.110 9.
2		Ģ	2.4210 59.FT. 39.8490 IN. 39.8490 IN. .0300 SCALE	
34 TE 28 SEP 75				MACH 1.297 1.297 1.297 1.249 1.249 1.249 1.249
:E 28			SCALE	
ő			SCALL SCALL SCALL	

TABULATED SOURCE FORCE DATA-149A

(RBIC39) (11 HAT 73)

r C		8 8 8
(RBI239) (11 MAT 73	SATA	ORBING =
(RB)@35	PARANETRIC SATA	000°9-
	-	ALPNA = RUCCER = RUCCLR =
AMES 11-707 IA9 ORA + S3 + T9 EXTERNAL TAPK	REFERENCE CATA	SREF = 2.4210 54.FT, YORF = 28.5300 IN. LREF = 39.8490 IN, YMRF = .0000 IN. RRF = 39.8490 IN, ZMRF = .0000 IN. SCALE = .0300 SCALE

	4,1944 -6,16000 -6,14000 -6,15000 -6,17000 -6,17000	ALPHA -6.12500 -6.12600 -6.12600 -6.12600 -6.13600
	CABLV .27229 .25600 .24490 .23170 .24779 00295	CABLV .23350 .22270 .21350 .21360 -,00136
5.90	CY .39230 .19670 01963 41780 41780	5.00 CY .37360 .16410 01320 20950 19660
-9.99/	CYN1725008750 .01390 .10910 .16900	-5.00/ CYN 15920 07880 .01100 .17975 .17975
GRACIENT INTERVAL =	CBL .04679 .02320 03320 03400 03400	AF CBL 22900 .04640 21480 .02310 2198003480 2280003520 2280005320
GRACIENT	CAF .17790 .18840 .20040 .21050 .19280	0
RN/L = 4.01	.49010 .4440 .4450 .4450 .4420 .4400	CA .44260 .43360 .44390 .4439010021
g /gg	CLM .16930 .19830 .21155 .20367 .17930 .179388	55, 0 QLM .16790 .19290 .19290 .17890
RUN NO.	00 47700 51370 52600 57200 57145	CN ND4900051400539005390059800
	ECTA -6.170- -2.070.4- -2.070. -2.180 -2.180 -2.180 -2.180	4.129 -4.129 -4.090 -1.020 -3.20 -2.120 -2.120
	1.105 1.105 1.105 1.105 1.105	MAG 1.251 1.251 1.251 1.251

	(RB)(Z4D) (11 MAY 73)	PARMETRIC CATA	44 = -4,000 ORBINC = .500 XR = -5,000 ELEVON = .000 ALR = .000	5.90	CY CABLY ALPNA	CY CABLV ALPHA ,34560 -21990 -4,02000 ,17630 .21110 -4,00200 ,01420 .20360 -4,01000 ,20230 .19680 -4,01000 ,27630 -4,01000
	¥		ALPHA RUDDER RUDFLR	-5.00/	CYN CY 19020 .3 07230 .1 .01490 .17390 .17390	CYN 14230 07740 .00650 .16580
	CTERNAL TAN			GRASIENT INTERVAL =	AF CBL 19720 .05030 - 20410 .02370 - 2163003470 - 2254003240 - 2177003660 - 0027200683 - GRACIENT INTERVAL =	CBL .0.4990 .0.2480 0.5390 0.3390
	S + T9 E			GRACIENT	CAF .19720 .20410 .21630 .21770 .01272 GRACIENT	CAF .22700 .23110 .23740 .24790
CATA-1A9A	AMES 11-707 1A9 CRA + S3 + T9 EXTERNAL TANK			FUVL = 3.99	CA .49030 .44120 .44170 .44870 .70206	.44690 .44190 .44190
TABLLATED SOURCE FORCE DATA-1A9A	AMES 11-77		28,5399 IN. .0009 IN.	51 U RW	CLM 245502. 205502. 265502. 267202.	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
TABULATED		\$	2 4342 2 4465 2 4465	RUN NO.	ON190000 22100 23600 23600 00163	ON - 19805 - 19805 - 23825
		CORPERINCE CATA	2.4215 59.FT. 39.6495 IN. 39.6495 IN.		9ETA -6.190 -4.080 .020 4.130 6.260	9ETA -8.190 -4.980 .010
CATE 20 SEP 73		Ü	SKCF = 2.4 LAEF = 39.0 BACF = 39.6		6 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1.290 1.290 1.290 1.290

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TABULATED SOURCE FORCE DATA-1A9A

AMES 11-707 1A9 ORA + \$3 + T9 EXTERNAL TANY

(RBW241) (11 WAT 75)

	ର ଜୁଣ				
	11 11	ALMA Seed	31000 31000 00122		ALP-A SOCOO SOC
PARANETRIC BATA	O OSSING :	CABLV .24100 .22500	21012. 21012. 3223.		CABLV .21330 .221330 .19710 .19710
PARANET	8	34740 134740	-,01740 -,20420 -,38220 -,04590	3.00	.33930 .17510 01400 36720 54562
	ALPW. RUSER RUSER	-5.02/ CYN 14570 07620	.09780 .09780 .16820	766°5-	CYN1387001080 .09400 .15780
		GRADIENT INTERVAL = NF CBL 20720 .09540	-,00510 -,03670 -,06360 -,06792	GRADIENT INTERVAL =	CB. .05290 .02720 -,00460 -,03490 -,06140
		GRADIENT : CAF . 20723	.22430 .23175 .21833 .00185	GRADIENT	CAF .23690 .24250 .25240 .25620 .24830
	in. In	CA .44823	.43600 .44230 .45060	RIVL = 3.01	CA .49020 .44320 .44370 .44990 .00006
	28.5309 IN. .0200 IN.		04890 03370 05320 05320	57/ G RI	QLM 05110 04440 05370 04270 04560
4	11 11 11 11 11 11 11 11 11 11 11 11 11	FUN ND. ON .04400	00380. 00320. 00380. 60980.	RUN NO.	ON .03760. .03300. .0250. .02800.
REFERENCE BATA	2,4210 53.FT. 39,8495 IN. 39,8495 IN. .0320 SCALE	BETA -8.200	-4,090 -202 -4,130 -6,253 GRADIENT		BETA -6.160 -4.060 .020 6.200 GRADIENT
ਜ਼	SAEF = 2.45 LAEF = 39.6 BAEF = 39.8	MAC+	1,101 1,101 1,101 1,101		1,247 1,247 1,247 1,247 1,247

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2	_		5 S			
PACE 165	(11 MAY 73				4,99000 4,09000 3,99000 4,19000 4,13000	4,10000 4,11000 4,12000 4,12000 4,05000
	(48%242) (PARANETRIC DATA	4,000 0081MC = -5,000 0,EW3W = ,000		CAR.V. .226953 .21973 .21695 .21695 .2173	CABLV .20550 .16650 .16050 .18950 .20270
	5	FARAM	ti #1 11	3.00	CY .3616G .17790 11170 36620 36460	72 34350 1,17250 0,00360 -,18530 -,35630
			ALPIA FLOODER FLOOTER	-5.00/	CYN 15410 07725 .08860 .08990 .15975 .01967	CYN149700721000120 .06240 .15200
	TERNAL TAN			GRACIENT INTERVAL =	AF CBL 22160 .05960 22160 .02760 2252000510 2159005640 2076905775 GRACIENT INTERVAL =	CBL .05620 .02620 .00700 .03580 .06300 .06300
	SS + T9 EX			GRACIENT	0	CAF .24200 .24810 .24140 .24310 .24100 -,002161
E 5ATA-1A9A	AMES 11-777 149 ORA + SS + T9 EXTERNAL TANK		żżż	ENT = 3.97	CA .43890 .43890 .43860 .43160 .43160 .43167 .00011	44750 .436653 .42773 .432653 .443373
TABULATED SOUFCE FORCE DATA-1A9A	ANES 11-7		28.5300 IN. (COO) IN. (OOC) IN.	85 G 48	CL*164301623018430175571755717557	004 1900 1917 1520 1717 16730
TABLEATED		\$		S. W.	00 32000 31000 31700 31700 00 00 00 00	00 131470 127200 27250 200002 282500,-
		creener 2474	2,4215 53,FT. 39,6435 IN. 39,8495 IN.		901.4 -4.195 -4.285 .027 4.135 6.285 66A31ENT	-6.1.40 -4.060 .020 4.110 6.210 GRACIENT
PATE 28 SEE 73		£	SECT = 2.4 LRET = 39.0 BRET = 39.0 SCARE = 30.0	•	######################################	1.246 1.246 1.246 1.246

No.

SAGE IN SCALE

TAS LATED SOURCE FORCE DATA-1494

CENTRAL COLUMN TO			9,000 00000 = 25,000		CABLY ALPHA 160 .22785 S.CZTO 121550 6.05700 150 .2275 8.CZTO 161 .22850 8.CZTO 161 .10091 1.1556		560 L S CALVA L ALPHA L S CALVA L S
		-	ALPHA = TUNSER = RUCSER =	-5.007 5.00	CYN CY -,16130 ,37360 -,04330 ,,9660 ,09300 -,19480 ,17380 -,194870 ,17381 -,38570	-5.9% 5.90	CYN CY 13860 .34380 06850 .16680 .072000260 .0720016780 .1484035190
	פאוראיי ועים			GRADIENT INTERVAL =		GRADIENT INTERVAL =	CBL
	AMES 11-707 IAS ORA + S3 + 79 EXTERIAL INC.			5.97	CA CAF 42380 .15800 42220 .21390 42230 .21810 42000 .199740 -10011207201	RN. = 3.01 GRAD	CA CAF ,44220 .24570 ,43310 .24585 ,43390 .25167 ,43180 .24140 ,44039 .23570 ,-,00028 -,00054
ASSENT SOUTH FORTE CAIN THOS	thes 11-707		28.5300 IN. .0000 IN. .0600 IN.	54/ 0 RN/L =	CLM -,28270 -,28657 -,28657 -,26570 -,29147	59/ G RW.	28490 28490 28430 27810
-45 J.A. E.		ATA	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RUN NO.	OS 2. 20292. 2. 20292. 2. 20912. 2. 20912.	SUN NO.	200598. 200598. 200598. 200888. 200888.
ž.		ADTESENCE BATA	2,4210 50.FT. 39,6495 IN. 39,8490 IN. .0300 SCALE		62.54 -4.070 -4.070 -4.190 -8.290 GRADIENT		BETA -8.100 -4.140 5 -4.140 5 4.120 5 8.240
25 9EF 73							MACH 1.245 1.245 1.245 1.245

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ì	E		-1.200 -000	
	(RB)@44) (11 MAY 75)	PARANETRIC BATA	. 2005 OKBING =	
		PAR	RETA = RUCER = RUCER =	-5.007 5.00
	AMES 11-757 1A9 CRA + 53 + 79 EXTERNAL TANK			GRADIENT INTERVAL = -5.00/ 5.00
TABULATED SOURCE FORCE DATA-1A9A	757 :A9 ORA + S		ï. ï.	RUN NO. 157/ 5 RWL = 4.05
SOURCE FOR	AMES 11-		26,5300 IN. .0000 IN. .0000 IV.	157/ S R
TABLEATED		5	= d3w2 = d3w1 = d3w1	RUN NO.
		ATAN TAKENTE BATA	2.4215 \$9.FT. 39.6495 IN. 39.6497 IN.	
28 SEF 73				

SEEF LOST SCALE

	BETA	GOGZű.	00025	ويمقن	(Acade)				00020	Care.	Constitution	Contains.			BETA	Sinc	02720	1000	00000	See al					12/20	12.00			EETA	6.000 E	التحتمين	02220	02020	وتعليق	C. P. A. C.	S. Carolin	Carlo Carlo		100000	1	
	CABLV	1.7673	. 7.679			1001	16001	.15719	15500	15333	15550	00000			CABLV	Cases.	1982	TARRO	17780		DELT.	1172	173271.	.17569	27771	-,00141			CABLV	.25520	.24125	.23430	22792	21665	20000	03000	20000	13C13-	- C	al open	
5.93	٤	(A)	00000	Carrier of	0000	- DEFE	- 00095	.00350	02820	0.00	13.540	2000	1077	3. 30	۲	00859	092560		0000	-, or re-	5.C6(1)	-,00659	-,00500	- 59239	.03250	September 1		5.05	Շ	01039	097720	-,01950	-,00780	Cather.	20000	San San San	10000	05100°-	115250°	84000	
-5.00/ 5.	3		erce.	- 23382		90010	02000	-,00210	06906	00000	Ceords -	-0.000	055.51	-5.00/	20.	CK PLUE		2000	0000	30,170	09500	06600	06200	.00150	College -	OK INC.	h and a land	= -5.007 \$	C	55475	06900	refised	(B)			G6555.	1210	00110	-,09440	-,00035	
GRADIENT INTERVAL =	(3		-,00090	00135	99173	-,00199	-,00200	- 000	50000		5253	60000°-	GRACIENT INTERVAL =	ŧ		GIEGO		00280	05270	00270	-,00260	-,00260	CFC[47]	10000	00000	00000	GRADIENT INTERVAL	Ë	10000	(8)(4)	Control	CENTRAL PROPERTY.	201020	-,00130	- 001 Gr	1.03.7	-,001.00	-,95166	C.B.	
GRADIENT	1	B	.04510	.05245	.05130	06590	0.06670	חההניו	50000	ייייייייייייייייייייייייייייייייייייייי	06680	06290	.00016	GRACIEN	ţ	3	06660	09266	.15415	.11960	.11020	10940	10690		origin.	C\$C5.1	015.5		Į,		THE OTHER		. Z1480	G8312*	.21825	22:22.	J:1222*	21673	1.59.39	660.00	
RN/L = 4.05		5	.22185	C#922.	.23139	61662	corre	0.00	61622	.21780	21525	.1984:	00169	RNL = 4.49	,	ರ	39390	.29383	.28395	28840	28585	28245	Koza		.2767.)	.27310	1992:	RN/L = 3.98	;	5	.43320	44.75	.44915	.44270	.43685	43060	.42845	.42260	06717.	-,15272	
1577 S RN		5	.21600	15295	19220	05890	10000	2000	-,03660	15850	16735	21860	-,02652	158/ S R		Š	.22530	.16745	.15500	09197	101630	08510	5000	-1440	19260	28785	93122	+59/ 5 R		ð	.26425	24.075	14575	Casas.	GER TG.	-,05620	:4455	25053	25289	03659	
RUN NO.		8	527.00	00665	(d.692 -		2000	-,0360	00890	20961.	.32300	44200	.05923	RUN NO.		3	55500	-,41800	-,2815D		00000	Grand's	20011	.24550	36030	47500	1:6565	S. S.		3	59700	45100	31600	27720	103800 F	(4.5.2)	26.176	40.10	50.4.US	. 17255	
		ACPA	180 W	100		56.5- 10.5-	-1.97	96.	2.070	4.919	6,549	200	GEACTENT			ACTA	-8.070	360.9-			1 to 1 to 1	1380.	60° +	4,015	6,000	7,995	SP 421ENT			ALPHA	-6.010	-5.993	£-3.97	366.1-	5		100 4		Control of	SECTION CONTRACTIONS	
		Č	•		3		6	909		000	Ş					0	106	Š	į (, i	3	Š,	106	1000	106.	8				MACH	1.103	1.173	1,193	•		1000	0.00	F	P	۳) د د د د د د د د د د د د د د د د د د د	

AMES 11-707 1AS 02A + S3 + T9 EXTERNAL TANS

(#BICAE)

PARAMETRIC CATA	2007 2000 273 - 2000 2700 2700 2700 2700 2700 2700 27	!
,	ETA = R.CO. = ETA	RUNNO, 1107 O RIVL = 3.00 GRACIDE INTERAL = -4.007 3.00
	28, 25.00 UN. Order UN. Order UN.	1157 S RWL = 3.00 (
	2.4210 52.67, YMEF 0 10.0457 134, YMEF 0 11.15.09.0455 134, ZMEF 0 12.15.0570 SAALE	R. C. S. W. S. C.
	Sept ::	

2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00
1000 - 10
98.000 900 900 900 900 900 900 900 900 900
40 40 40 40 40 40 40 40 40 40 40 40 40 4
CAF .22585 .23180 .23775 .24595 .24595 .24525 .24537 .24175 .24175
CA. - 44.48°C - 44.48°C - 44.48°C - 44.89°C - 45.39°C - 42.89°C - 42.89°C - 42.80°C - 42.8
.25625 .19355 .13330 .57115 .00390 -19550 -13560 -13560 -13560 -13560 -13560 -13560 -13560 -13560
2. 19650 - 19650 - 19650 - 19630 - 19690 - 19690 - 19690 - 19690
2.040 -3.940 -3.940 -2.940 -2.940 -2.940 -2.940 -2.940 -3.040 -3.
1,230 1,230 1,230 1,230 1,230 1,230 1,230 1,230 1,230 1,230